

**State:** Pennsylvania **Filing Company:** John Hancock Life Insurance Company (USA)  
**TOI/Sub-TOI:** LTC03G Group Long Term Care/LTC03G.001 Qualified  
**Product Name:** 2016 GLTC INFORCE RATE INCREASE FILING  
**Project Name/Number:** 2016 GLTC INFORCE FORM/RATE INCREASE FILING/2016 GLTC INFORCE FORM/RATE INCREASE FILING

## Filing at a Glance

Company: John Hancock Life Insurance Company (USA)  
Product Name: 2016 GLTC INFORCE RATE INCREASE FILING  
State: Pennsylvania  
TOI: LTC03G Group Long Term Care  
Sub-TOI: LTC03G.001 Qualified  
Filing Type: Rate - Other (Not M.U. or G.I. Product)  
Date Submitted: 01/10/2017  
SERFF Tr Num: MULF-130816976  
SERFF Status: Assigned  
State Tr Num: MULF-130816976  
State Status: Received Review in Progress  
Co Tr Num: 2016 GLTC INFORCE RATE INCREASE FILING #1  
  
Implementation: On Approval  
Date Requested:  
Author(s): Michelle Fluett, Carol Folsom, Marie Roche, Joanne Witham  
Reviewer(s): Jim Lavery (primary)  
Disposition Date:  
Disposition Status:  
Implementation Date:

### State Filing Description:

Proposed aggregate 18.6% increase on 5,605 policyholders of John Hancock group LTC forms GPB-COV-0002, P-GLTC(2002-2) PA, and P-FACE(2004) PA.

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## General Information

Project Name: 2016 GLTC INFORCE FORM/RATE INCREASE FILING Status of Filing in Domicile: Pending  
 Project Number: 2016 GLTC INFORCE FORM/RATE INCREASE FILING Date Approved in Domicile:  
 Requested Filing Mode: Review & Approval Domicile Status Comments:  
 Explanation for Combination/Other: Market Type: Group  
 Submission Type: New Submission Group Market Size: Small and Large  
 Group Market Type: Employer Overall Rate Impact: 18.6%  
 Filing Status Changed: 01/10/2017  
 State Status Changed: 01/10/2017 Deemer Date:  
 Created By: Michelle Fluett Submitted By: Joanne Witham  
 Corresponding Filing Tracking Number: MULF-130817063  
 State TOI: LTC03G Group Long Term Care State Sub-TOI: LTC03G.001 Qualified

### Filing Description:

John Hancock is requesting premium rate increases for the policy forms listed below. These rate increases are in response to the results of our most recently completed experience studies, refinements to our modeling approach and correction of certain projections and assumptions in our prior 2010 rate increase filing. A more thorough discussion of each of these elements is found in Appendix 1. In addition, Appendix 1 also addresses how John Hancock assures there is no cross subsidization between states and that past losses are not being recouped.

As a result of the factors noted above and emerging experience since our last filing, we are requesting a premium rate increase on the policy series listed below and are enclosing the actuarial memos and rates for your review and acceptance.

John Hancock Policy Series Approval Dates Years Policy Series Available for Sale Rate Increase  
 GPB-COV-0002, et al 2/26/2001  
 1998-2000  
 8.4%

P-FACE(2002-2), et al. 12/1/2003 & 2/17/2011  
 2004-2010  
 15.8%  
 P-FACE(2004), et al. 6/22/2006 & 2/17/2011  
 2007-2010  
 28.4%

### Alternative Options For Insureds

Insureds affected by the premium will receive a notice 90-days prior to the policy anniversary. We plan to offer to affected insureds that have purchased the automatic compound inflation feature an opportunity to keep their premium rate neutral by reducing their inflation on a prospective basis (they will keep any coverage that has already inflated). We will also allow affected insureds to reduce their benefit period, reduce their daily benefit amount, and/or drop optional benefit features.

In addition, if the requested increase is approved in full, we will make available the 2014 NAIC Model Contingent Nonforfeiture Benefit for all affected certificateholders, even if it is not otherwise required in your State.

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<b>State:</b>	Pennsylvania	<b>Filing Company:</b>	John Hancock Life Insurance Company (USA)
<b>TOI/Sub-TOI:</b>	LTC03G Group Long Term Care/LTC03G.001 Qualified		
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Subject to your acceptance, the new premium rates will be applied to all group policies that have been issued in your state. If coverage is issued in your state under group policies issued in another state, then the situs state laws and regulations will govern the premium rates for that coverage. Rates will be applied to group policies issued in your state as soon as practical based upon administrative and case feasibility following acceptance of this submission by your Department.

The following items are included in this submission:

- the submission letter and Appendix 1.
- all actuarial material.
- all required certifications.
- required filing fees.

Please do not hesitate to contact us regarding this submission. We will be happy to meet with the Department either in person or via conference call at a time of your convenience.

## Company and Contact

### Filing Contact Information

Carol Folsom, Contract Consultant	cfolsom@jhancock.com
200 Berkeley Street	888-877-6075 [Phone]
Boston, MA 02117	617-572-0399 [FAX]

### Filing Company Information

John Hancock Life Insurance Company (USA)	CoCode: 65838	State of Domicile: Michigan
200 Berkeley Street	Group Code: 904	Company Type:
Boston, MA 02176	Group Name:	State ID Number:
(617) 572-6000 ext. [Phone]	FEIN Number: 01-0233346	

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## Filing Fees

Fee Required?	No
Retaliatory?	No
Fee Explanation:	

<b>SERFF Tracking #:</b>	MULF-130816976	<b>State Tracking #:</b>	MULF-130816976	<b>Company Tracking #:</b>	2016 GLTC INFORCE RATE INCREASE FILING #...
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<b>State:</b>	Pennsylvania	<b>Filing Company:</b>	John Hancock Life Insurance Company (USA)
<b>TOI/Sub-TOI:</b>	LTC03G Group Long Term Care/LTC03G.001 Qualified		
<b>Product Name:</b>	2016 GLTC INFORCE RATE INCREASE FILING		
<b>Project Name/Number:</b>	2016 GLTC INFORCE FORM/RATE INCREASE FILING/2016 GLTC INFORCE FORM/RATE INCREASE FILING		

## Rate Information

Rate data applies to filing.

<b>Filing Method:</b>	Review & Approval
<b>Rate Change Type:</b>	Increase
<b>Overall Percentage of Last Rate Revision:</b>	39.700%
<b>Effective Date of Last Rate Revision:</b>	02/17/2011
<b>Filing Method of Last Filing:</b>	Review & Approval

## Company Rate Information

Company Name:	Overall % Indicated Change:	Overall % Rate Impact:	Written Premium Change for this Program:	Number of Policy Holders Affected for this Program:	Written Premium for this Program:	Maximum % Change (where req'd):	Minimum % Change (where req'd):
John Hancock Life Insurance Company (USA)	18.600%	18.600%	\$1,594,188	5,605	\$8,591,387	28.400%	-5.300%

<b>State:</b>	Pennsylvania	<b>Filing Company:</b>	John Hancock Life Insurance Company (USA)
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## Rate/Rule Schedule

Item No.	Schedule Item Status	Document Name	Affected Form Numbers (Separated with commas)	Rate Action	Rate Action Information	Attachments
1		Rate Table	GPB-COV-0002	Revised	Previous State Filing Number: not available Percent Rate Change Request: 8.4	
2		Rate Table	P-GLTC(2002-2) PA, et al.	Revised	Previous State Filing Number: MULF-127011806 Percent Rate Change Request: 15.8	
3		Rate Table	P-FACE(2004) PA	Revised	Previous State Filing Number: MULF-127011806 Percent Rate Change Request: 28.4	

<b>State:</b>	Pennsylvania	<b>Filing Company:</b>	John Hancock Life Insurance Company (USA)
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## Supporting Document Schedules

<b>Satisfied - Item:</b>	Transmittal Letter (A&H)
<b>Comments:</b>	
<b>Attachment(s):</b>	PA_GLTC Appendix 1.pdf PA_GLTC Cover Letter.pdf
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Satisfied - Item:</b>	Actuarial Certification (A&H)
<b>Comments:</b>	Please see Actuarial Memornadum.
<b>Attachment(s):</b>	
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Satisfied - Item:</b>	Actuarial Memorandum and Explanatory Information (A&H)
<b>Comments:</b>	
<b>Attachment(s):</b>	PA GLTC 1997 Filing Exhibit.pdf PA Care Choice Filing Exhibit.pdf PA Corporate Choice Filing Exhibit.pdf
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Bypassed - Item:</b>	Advertisements (A&H)
<b>Bypass Reason:</b>	There are no advertisements contained in this filing.
<b>Attachment(s):</b>	
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Bypassed - Item:</b>	Authorization to File (A&H)
<b>Bypass Reason:</b>	Not applicable. We are filing without the assistance of a third party.
<b>Attachment(s):</b>	
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Bypassed - Item:</b>	Insert Page Explanation (A&H)
<b>Bypass Reason:</b>	The insert pages/amendment forms and explanations are contained under associated form filing: MULF-130817063.

<b>State:</b>	Pennsylvania	<b>Filing Company:</b>	John Hancock Life Insurance Company (USA)
<b>TOI/Sub-TOI:</b>	LTC03G Group Long Term Care/LTC03G.001 Qualified		
<b>Product Name:</b>	2016 GLTC INFORCE RATE INCREASE FILING		
<b>Project Name/Number:</b>	2016 GLTC INFORCE FORM/RATE INCREASE FILING/2016 GLTC INFORCE FORM/RATE INCREASE FILING		

<b>Attachment(s):</b>	
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Bypassed - Item:</b>	Rate Table (A&H)
<b>Bypass Reason:</b>	Not applicable to this submission.
<b>Attachment(s):</b>	
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Bypassed - Item:</b>	Replacement Form with Highlighted Changes (A&H)
<b>Bypass Reason:</b>	New forms are being filed. The forms are filed under associated form filing: MULF-130817063.
<b>Attachment(s):</b>	
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Satisfied - Item:</b>	Reserve Calculation (A&H)
<b>Comments:</b>	Please see actuarial memorandum.
<b>Attachment(s):</b>	
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Bypassed - Item:</b>	Variability Explanation (A&H)
<b>Bypass Reason:</b>	Variability included with form filing (MULF-130817063)
<b>Attachment(s):</b>	
<b>Item Status:</b>	
<b>Status Date:</b>	

<b>Satisfied - Item:</b>	Sample Certificateholder Communication Package
<b>Comments:</b>	
<b>Attachment(s):</b>	GLTC 2016 Certholder Pkg_ABI_Final.pdf
<b>Item Status:</b>	
<b>Status Date:</b>	

**Appendix 1**  
**John Hancock Life Company (U.S.A.)**  
**Company NAIC # 65838; FEIN #: 01-0233346**  
**Group Long-Term Care Insurance Rate Revision Submission**

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John Hancock is requesting premium rate increases for the policy forms listed in the cover letter. These rate increases are in response to the following:

- Our most recent comprehensive experience studies show unfavorable trends since the prior study that prompted our last rate increase filing. The largest impact with respect to updating assumptions is attributable to a decrease to mortality rates. Updates to morbidity assumptions also had a large impact on the P-FACE(2004) plan.
- We have applied a more refined modeling approach that is causing movements in our loss ratio.
- We have corrected certain projections and assumptions in our prior filing in 2010 that had understated the loss ratio, which meant the rate increases we requested in our prior filing were too low (model and assumption corrections). We have enhanced our model vetting process, in which an independent team reviews all of the assumptions and calculations in our model to ensure that all model inputs match our documented assumptions.

With respect to actual experience, results of experience studies and modeling refinements, we are calculating the rate increase assuming an implementation date of 1/1/2015, which lowers the increases needed to bring John Hancock back to its target loss ratio. Extensive analysis was needed in order to understand loss ratio movements and confirm a rate increase was needed. Therefore, we assumed a 1/1/2015 implementation date rather than passing on the costs to insureds. This lowers the rate increase that would be borne by customers by \$54M on a nationwide basis.

With respect to the changes resulting from the model and assumption corrections, we are calculating the rate increase on a basis assuming they were implemented at the time of the 2010 rate increase instead of reflecting a current implementation date. This lowers the rate increases needed to bring John Hancock back to its target loss ratio. John Hancock is absorbing the impact of applying this implementation date, rather than passing on the costs to insureds. This lowers the rate increase that would be borne by customers by \$116M on a nationwide basis.

**Comprehensive Experience Studies**

Mortality, lapse and morbidity experience studies were completed since our last filing. Across all of our plans, updates to mortality assumptions increased our loss ratio, lapse assumption updates decreased our loss ratio, and for morbidity, the impact differed by plan.

- Our mortality experience study saw lower mortality rates, causing the loss ratio to increase for all plans. Due to the durations at which the updates to mortality rates were made, there was a larger loss ratio impact to more recently issued plans (P-FACE(2004)) and a smaller impact to older plans (GPB-COV-0002).
- Lapse rates were increased slightly for all plans (in the range of .1% to .2%), leading to a slightly lower loss ratio.
- Morbidity updates caused an increase to the loss ratio for the P-FACE(2004) plan, a very minimal impact for the P-FACE(2002-2) plan, and a reduction to the loss ratio for the GPB-COV-0002 Plan.

**Refinements**

During our 2010 filing there were a few reasonable simplifying assumptions utilized. Moving to a more refined approach caused movements in our loss ratio. By reflecting the refinements in our calculation of our rate increase, we more accurately reflect the experience we expect to see in the future instead of waiting for the experience to unfold over time, which would result in larger rate increases in the future. Some of the assumptions that are now modeled in an enhanced way are described in detail below:

- Our prior filing used gender blended mortality tables while our current filing uses gender distinct tables.
- Our prior filing used pivotal issue ages (mostly quinquennial) when modeling mortality rates while our current filing uses actual issue ages.
- Our prior filing applied lapses at policy year-ends while our current filing applies lapses quarterly.



Since our prior filing we have converted our valuation system from a claim cost projection model to First Principles methodology, consistent with the industry best practices.

For plans that upgraded to our P-FACE(2002-2) plan or transferred from another carrier to our P-FACE(2002-2) plan, past premiums (and asset transfers for plans transferring from another carrier) were ignored and future premiums were based on the attained age premium without any premium discount in our 2010 projection model. We are now reflecting past premiums paid (and asset transfers for transfers) and projecting future premiums based on the attained age premium after the discount. The PV of premiums over the life of the policy is the same between the two methods at a 6% discount rate (the pricing rate for the plan), but are different when discounting at the valuation interest rate as is done for rate increases. The prior methodology understated the loss ratio which understated the 2010 rate increase.

Model Refinements Account for the following impact to our overall rate increase:

Plan	Rate Increase Due to Model Refinement
GPB-COV-0002	2.6%
P-FACE(2002-2)	9.8%
P-FACE(2004)	15.8%

#### **Model and Assumption Corrections**

John Hancock is also requesting a rate increase because of model and assumption corrections needed in the projections used in our prior filing. The projections in our prior filing understated the loss ratio which meant the rate increases we requested in our prior filing were too low. We have enhanced our model vetting process, in which an independent team reviews all of the assumptions and calculations in our model to ensure that all model inputs match our documented assumptions.

Model and Assumption Corrections Account for the following impact to our overall rate increase:

Plan	Rate Increase Due to Model and Assumption Corrections
GPB-COV-0002	4.4%
P-FACE(2002-2)	8.4%
P-FACE(2004)	10.4%

Below is the complete list of model and assumption corrections needed in the projections used in our prior filings. In some cases, the correction would have resulted in an overstatement or understatement of the rate increase, but in total, the net impact was an understatement of the rate increase:

#### Impacting all plans - GPB-COV-0002, P-FACE(2002-2), and P-FACE(2004)

For our Guaranteed Issue business, we were using lapse rates for fully underwritten business for durations 2+. This caused lapse rates to be understated.

Historical mortality improvements from 1994 (the date of the base mortality table) to the projection date (12/31/09) was modeled using 10 years instead of 16 years. This caused mortality rates to be overstated.

The mortality improvement referred to the policy year instead of the projection year, which caused mortality rates to be overstated.

The mortality selection factors for policies issued in 2004 or later were not updated in our 2010 projection models (the 2010 models used an ultimate mortality selection factor of 100% instead of 93%). This caused mortality to be overstated.

There was an over-counting of deaths in the 2010 mortality experience study. This caused mortality rates to be overstated.

#### Impacting all Plans Except for P-FACE(2004)

The models we used in projecting benefits for our 2010 rate increase for two of the plans contained some claim cost multipliers that were inconsistent with our valuation models. This inconsistency understated our loss ratios.

#### Impacting P-FACE(2002-2) only

For plans that upgraded to our 2002 plan, morbidity, mortality and lapse rates were based on the issue age and duration starting at the time of the upgrade in our 2010 projection model rather than being based on the original issue age and duration from the issue date of the original coverage. This overstated our loss ratio.

#### Impacting P-FACE(2004) only

Limited pay policies were projected with premiums paid for life in our 2010 projection model rather than for the limited payment period which overstated premiums.

### **Ensuring No Cross-Subsidization Between States**

We have ensured no state's rate increase approvals will subsidize other states' experience. Rate increases will vary by state, but only to reflect the timing and amount of prior rate increases approved by that state. This is accomplished by first backing-out all prior rate increases from our nationwide premium data. We then re-introduce prior rate increases with the amount and timing based on your state's prior approvals. The current proposed rate increases are then determined based on the amounts needed in order to achieve our target loss ratios where our targets reflect the lifetime loss ratios certified to in our prior filing.

Although some states may have capped our previous inforce rate increase filings, in each case this was done with the understanding that the full amount of the proposed rate increases were justified and that John Hancock would be refiling for the remainder at a later date. In instances where the remainder remains unapproved, it has been included in the current filings.

### **Past Losses Testing**

Preventing companies from recouping past losses was the subject of a recent discussion by the NAIC in late 2013. The accepted methodology by NAIC defines past losses as actual past claims less expected past claims when determining loss ratio compliance where expected past claims are defined as the following:

Expected claims shall be calculated based on the original filing assumptions assumed until new assumptions are filed as part of a rate increase. New assumptions shall be used for all periods beyond each requested effective date of a rate increase regardless of whether or not the rate increase is approved. Expected claims are calculated for each calendar year based on the in-force during the calendar year. Expected claims shall include margins for moderately adverse experience; the margins included in the claims that were used to determine the lifetime loss ratio consistent with the original filing or as modified in any rate increase filing.

The rate increases we calculated follow the methodology described above to ensure that we are not recouping past losses.

## John Hancock Life Insurance Company (U.S.A.)

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John Hancock Place  
Post Office Box 111 C-7-30  
Boston, Massachusetts 02117  
1-888-877-6075 Ext. 1  
Direct: (617) 572-0281  
Email: jwitham@jhancock.com

Joanne Witham  
Director  
**LTC Contracts and Legislative Services**

January 10, 2017

Honorable Teresa D. Miller  
Pennsylvania Insurance Department  
1326 Strawberry Square  
Harrisburg, Pennsylvania 17120

Re: **John Hancock Life Insurance Company (U.S.A.)  
Company NAIC # 65838; FEIN #: 01-0233346  
Group Long-Term Care Insurance Rate Revision Submission  
Revised Actuarial Memos**

Dear Commissioner:

John Hancock is requesting premium rate increases for the policy forms listed below. These rate increases are in response to the results of our most recently completed experience studies, refinements to our modeling approach and correction of certain projections and assumptions in our prior 2010 rate increase filing. A more thorough discussion of each of these elements is found in Appendix 1. In addition, Appendix 1 also addresses how John Hancock assures there is no cross subsidization between states and that past losses are not being recouped.

As a result of the factors noted above and emerging experience since our last filing, we are requesting a premium rate increase on the policy series listed below and are enclosing the actuarial memos and rates for your review and acceptance.

<b>John Hancock Policy Series</b>	<b>Approval Dates</b>	<b>Years Policy Series Available for Sale</b>	<b>Rate Increase</b>
GPB-COV-0002, et al	3/24/1998	1998-2000	8.4%
P-FACE(2002-2), et al.	12/1/02003 & 2/17/2011	2004-2010	15.8%
P-FACE(2004), et al.	6/22/2006 & 2/17/2011	2007-2010	28.4%

### **Alternative Options For Insureds**

Insureds affected by the premium will receive a notice [90]-days prior to the policy anniversary. We plan to offer to affected insureds that have purchased the automatic compound inflation feature an opportunity to keep their premium rate neutral by reducing their inflation on a prospective basis (they will keep any coverage that has already inflated). We will also allow affected insureds to reduce their benefit period, reduce their daily benefit amount, and/or drop optional benefit features.

In addition, if the requested increase is approved in full, we will make available the 2014 NAIC Model Contingent Nonforfeiture Benefit for all affected certificateholders, even if it is not otherwise required in your State.

Subject to your acceptance, the new premium rates will be applied to all group policies that have been issued in your state. If coverage is issued in your state under group policies issued in another state, then the situs state laws and regulations will govern the premium rates for that coverage. Rates will be applied to group policies issued in your state

as soon as practical based upon administrative and case feasibility following acceptance of this submission by your Department.

The following items are included in this submission:

- the submission letter and Appendix 1.
- all actuarial material.
- all required certifications.
- required filing fees.

Please do not hesitate to contact us regarding this submission. We will be happy to meet with the Department either in person or via conference call at a time of your convenience.

Sincerely,

A handwritten signature in cursive script that reads "Joanne Witham". The signature is written in black ink and is positioned to the left of the typed name.

Joanne Witham

**John Hancock Life Insurance Company (U.S.A.)**  
**Actuarial Memorandum for Inforce Rate Increase – Group Long-Term Care Policy Series**  
**January 9, 2017**

**Product Name**

Group Long Term Care

**Form Number**

GPB-COV-0002

**Issue Date Range**

July 1998 - December 2000

**1. Scope & Purpose**

This memorandum consists of materials which support the development of new premium rates for the above captioned Policy series forms, for certificates issued with the rates that were accepted by your state. The purpose of this memorandum is to demonstrate that the requirements of this State in regards to an in force rate increase request have been met. This rate filing is not intended to be used for any other purpose.

**2. Benefit Description**

A brief policy description for the certificate form:

**GPB-COV-0002**

This is a Group Long-Term Care plan that pays benefits to the certificate holder insured for the following covered care or services provided to the insured:

- Confinement in a Nursing Home or Alternate Care Facility for room, board and care services;
- Home Health Care; Hospice Care, Respite Care; or
- Attendance at an Adult Day Care Center providing Adult Day Care.

It is intended to be a Qualified Long-Term Care Insurance contract under the Federal Internal Revenue Code.

The benefit trigger is determined based on the insured's cognitive impairment or his requiring substantial assistance to perform two out of six activities of daily living (ADLs) of bathing, dressing, eating, toileting, transferring and maintaining continence. The insured must be certified to be chronically ill by a licensed health care practitioner.

Long-Term Care Benefits are paid at 100% of the actual charges for each day of care after the qualification period up to:

**Nursing Home (NH) Care:**

- (a) the Nursing Home Daily Maximum Benefit (NH DMB) elected for care received in a NH, or

**Home Health / Adult Day Care:**

- (b) the Home Health DMB elected for covered services received in a community setting (including home health care, adult day care and hospice care provided outside a NH, hospice facility or alternate care facility) or

**Alternate Care Facility (ACF):**

- (c) the ACF DMB elected for covered services received in an ACF, or

**John Hancock Life Insurance Company (U.S.A.)**  
**Actuarial Memorandum for Inforce Rate Increase – Group Long-Term Care Policy Series**  
**January 9, 2017**

Informal Care:

- (d) the Informal Care DMB elected up to the number of days per calendar year elected for covered Informal Care services (custodial or homemaker services provided by a person without professional skills).

Benefits are payable until the Lifetime Maximum Benefit (LMB) is reached. Benefits are coordinated with Medicare as well as with any other Group certificate coverages.

**3. Renewability**

Certificates under this policy form have a guaranteed renewable clause.

**4. Applicability**

This filing is applicable to inforce policies and to new certificates enrolling in this policy series. The premium changes will apply to the base forms as well as all applicable optional benefits upon the expiration of any applicable group policy rate guarantees.

**John Hancock Life Insurance Company (U.S.A.)**  
**Actuarial Memorandum for Inforce Rate Increase – Group Long-Term Care Policy Series**  
**January 9, 2017**

**5. Actuarial Assumptions**

Morbidity

The morbidity assumptions are derived from our own experience, following a comprehensive claim study recently completed. The study has been peer reviewed both internally as well as by an Independent third party.

Our claims projections include 12 years of future morbidity improvements at 1.1% per year.

Below are currently expected sample annual claim costs for a GPB-COV-0002 policy, \$10 daily benefit, and 5yr LMB:

Issue Age 45		
Age	FPO	ABI
45	4.39	6.32
50	4.43	7.91
55	6.09	13.29
60	6.81	16.35
65	11.70	34.85
70	21.71	78.97
75	58.95	271.07
80	147.24	854.24
85	314.23	2,254.50

Issue Age 50		
Age	FPO	ABI
50	5.47	7.80
55	6.89	12.13
60	8.15	16.04
65	15.70	38.03
70	33.44	98.54
75	89.83	333.37
80	215.09	1,005.01
85	394.43	2,280.14

Issue Age 60		
Age	FPO	ABI
60	7.49	9.72
65	15.07	24.10
70	35.72	68.18
75	99.34	234.30
80	243.40	715.37
85	443.63	1,601.82

**John Hancock Life Insurance Company (U.S.A.)**  
**Actuarial Memorandum for Inforce Rate Increase – Group Long-Term Care Policy Series**  
**January 9, 2017**

Voluntary Lapses

The voluntary lapse rates are also based on our own experience:

In addition to the lapse rates shown below, we assume an additional 1.1% lapse rate due to the rate increase.

**Guaranteed Issue:**

Duration	Issue Age								
	30	40	45	50	55	60	65	70	80
1	18.7%	10.8%	8.8%	7.4%	6.8%	7.0%	7.0%	7.0%	7.0%
2	16.0%	9.4%	7.4%	5.9%	5.4%	5.4%	5.4%	5.4%	5.4%
3	12.4%	7.0%	6.5%	4.9%	4.0%	3.8%	3.8%	3.8%	3.8%
4	10.5%	6.3%	5.7%	4.3%	3.4%	3.0%	3.0%	3.0%	3.0%
5	8.9%	5.6%	5.0%	3.8%	3.0%	2.4%	2.4%	2.4%	2.4%
6	7.5%	5.0%	4.4%	3.3%	2.6%	1.9%	1.9%	1.9%	1.9%
7	6.3%	4.4%	3.8%	2.9%	2.2%	1.5%	1.5%	1.5%	1.5%
8	5.3%	3.9%	3.3%	2.5%	1.9%	1.2%	1.2%	1.2%	1.2%
9	4.8%	3.6%	3.0%	2.3%	1.7%	1.0%	1.0%	1.0%	1.0%
10	4.7%	3.3%	2.7%	2.1%	1.5%	0.8%	0.8%	0.8%	0.8%
11	4.3%	3.0%	2.4%	1.9%	1.4%	0.6%	0.6%	0.6%	0.6%
12	3.7%	2.7%	2.1%	1.6%	1.2%	0.5%	0.5%	0.5%	0.5%
13	3.3%	2.4%	1.8%	1.4%	1.0%	0.5%	0.5%	0.5%	0.5%
14	3.0%	2.2%	1.6%	1.3%	0.9%	0.5%	0.5%	0.5%	0.5%
15	2.7%	1.9%	1.4%	1.1%	0.8%	0.5%	0.5%	0.5%	0.5%
16	2.4%	1.7%	1.2%	1.0%	0.7%	0.5%	0.5%	0.5%	0.5%
17	2.2%	1.5%	1.1%	0.9%	0.6%	0.5%	0.5%	0.5%	0.5%
18	2.0%	1.4%	0.9%	0.8%	0.5%	0.5%	0.5%	0.5%	0.5%
19	1.8%	1.2%	0.8%	0.7%	0.5%	0.5%	0.5%	0.5%	0.5%
20	1.6%	1.1%	0.8%	0.7%	0.5%	0.5%	0.5%	0.5%	0.5%
21	1.4%	1.0%	0.8%	0.7%	0.5%	0.5%	0.5%	0.5%	0.5%
22	1.3%	1.0%	0.8%	0.7%	0.5%	0.5%	0.5%	0.5%	0.5%
23	1.2%	1.0%	0.8%	0.7%	0.5%	0.5%	0.5%	0.5%	0.5%
24	1.0%	1.0%	0.8%	0.7%	0.5%	0.5%	0.5%	0.5%	0.5%
25+	1.0%	1.0%	0.8%	0.7%	0.5%	0.5%	0.5%	0.5%	0.5%



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**Fully Underwritten:**

Duration	Issue Age								
	30	40	45	50	55	60	65	70	80
1	10.3%	5.8%	4.7%	3.4%	2.9%	3.0%	3.7%	3.0%	3.0%
2	8.4%	4.8%	4.0%	2.9%	2.4%	2.1%	2.4%	1.8%	1.8%
3	7.2%	4.6%	3.4%	2.8%	2.0%	1.7%	1.4%	1.4%	1.4%
4	6.2%	4.0%	2.9%	2.3%	1.7%	1.3%	1.1%	1.1%	1.1%
5	5.4%	3.5%	2.5%	2.0%	1.4%	1.1%	0.9%	1.0%	1.0%
6	4.6%	3.0%	2.2%	1.7%	1.2%	0.8%	0.7%	0.8%	0.8%
7	4.0%	2.6%	1.9%	1.4%	1.0%	0.7%	0.4%	0.7%	0.7%
8	3.4%	2.3%	1.6%	1.2%	0.9%	0.5%	0.4%	0.5%	0.5%
9	2.9%	2.0%	1.4%	1.0%	0.7%	0.4%	0.4%	0.5%	0.5%
10	2.7%	1.7%	1.3%	0.8%	0.6%	0.4%	0.4%	0.5%	0.5%
11	2.4%	1.5%	1.1%	0.8%	0.6%	0.4%	0.4%	0.5%	0.5%
12	2.3%	1.3%	0.8%	0.6%	0.5%	0.4%	0.4%	0.5%	0.5%
13	2.1%	1.2%	0.7%	0.6%	0.4%	0.4%	0.4%	0.5%	0.5%
14	2.0%	1.0%	0.6%	0.5%	0.4%	0.4%	0.4%	0.5%	0.5%
15	1.8%	0.9%	0.5%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
16	1.7%	0.8%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
17	1.6%	0.7%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
18	1.4%	0.7%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
19	1.3%	0.6%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
20	1.2%	0.6%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
21	1.1%	0.6%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
22	1.1%	0.6%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
23	1.0%	0.6%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
24	0.9%	0.6%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
25+	0.6%	0.6%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%

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**Mortality**

The mortality rates have also been derived based on our own experience within our retail and group long-term care block of business.

The base mortality table is the unloaded 1994 Group Annuity Mortality Table, sex-distinct, with 19 years of historical improvements based on scale AA. We then apply the following series of adjustment factors which vary by underwriting class and gender:

**Fully Underwritten:**

<b>Policy Duration</b>	<b>Issue Age</b>			
	<b>&lt; = 55</b>	<b>65</b>	<b>75</b>	<b>&gt; = 82</b>
1	33.3%	19.0%	19.0%	28.5%
2	36.1%	21.9%	25.7%	33.3%
3	39.0%	24.7%	32.3%	38.0%
4	40.9%	27.6%	39.0%	42.8%
5	42.8%	31.4%	45.6%	47.5%
6	44.7%	36.1%	52.3%	52.3%
7	46.6%	41.8%	55.1%	57.0%
8	48.5%	48.5%	58.0%	61.8%
9	50.4%	55.1%	60.8%	66.5%
10	51.3%	61.8%	63.7%	71.3%
11	52.3%	64.6%	69.4%	76.0%
12	53.6%	66.5%	75.1%	80.8%
13	54.9%	67.5%	77.9%	85.5%
14	56.2%	68.5%	80.8%	90.3%
15	57.4%	69.7%	83.6%	95.0%
16	58.7%	71.1%	85.5%	95.0%
17	60.0%	72.5%	86.9%	95.0%
18	61.3%	74.0%	88.5%	95.0%
19	62.6%	75.4%	90.1%	95.0%
20	63.9%	76.9%	92.2%	95.0%
21	65.6%	78.4%	95.0%	95.0%
22	67.5%	80.1%	95.0%	95.0%
23	69.4%	81.7%	95.0%	95.0%
24	72.2%	83.4%	95.0%	95.0%
25	76.0%	85.1%	95.0%	95.0%
26	79.8%	86.7%	95.0%	95.0%
27	83.6%	88.4%	95.0%	95.0%
28	87.4%	90.0%	95.0%	95.0%
29	91.2%	91.7%	95.0%	95.0%
30+	95.0%	95.0%	95.0%	95.0%

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**Guaranteed Issue Male:**

Policy Duration	Issue Age				
	< = 45	55	65	75	> = 84
1	133.0%	76.0%	52.3%	65.6%	95.0%
2	129.2%	75.1%	53.2%	67.5%	95.0%
3	125.4%	74.1%	54.2%	70.3%	95.0%
4	121.6%	73.2%	55.1%	73.2%	95.0%
5	117.8%	72.2%	57.0%	76.0%	95.0%
6	115.0%	70.3%	58.9%	79.8%	95.0%
7	112.1%	68.4%	60.8%	83.6%	95.0%
8	109.3%	64.6%	61.8%	87.4%	95.0%
9	106.4%	60.8%	62.7%	91.2%	95.0%
10	103.6%	57.0%	63.7%	95.0%	95.0%
11	100.7%	53.2%	65.6%	95.0%	95.0%
12	98.8%	54.2%	67.5%	95.0%	95.0%
13	96.9%	55.1%	70.3%	95.0%	95.0%
14	95.0%	57.0%	73.2%	95.0%	95.0%
15	91.2%	58.0%	76.0%	95.0%	95.0%
16	88.8%	59.5%	80.6%	96.0%	96.0%
17	86.8%	62.1%	85.4%	97.0%	97.0%
18	85.2%	63.7%	90.2%	98.0%	98.0%
19	83.9%	65.3%	95.0%	99.0%	99.0%
20	82.8%	67.0%	100.0%	100.0%	100.0%
21	81.3%	69.0%	100.0%	100.0%	100.0%
22	80.0%	71.0%	100.0%	100.0%	100.0%
23	79.1%	74.0%	100.0%	100.0%	100.0%
24	78.6%	77.0%	100.0%	100.0%	100.0%
25	84.0%	80.0%	100.0%	100.0%	100.0%
26	88.0%	84.0%	100.0%	100.0%	100.0%
27	92.0%	88.0%	100.0%	100.0%	100.0%
28	96.0%	92.0%	100.0%	100.0%	100.0%
29	98.0%	96.0%	100.0%	100.0%	100.0%
30+	100.0%	100.0%	100.0%	100.0%	100.0%

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**Guaranteed Issue Female:**

Policy Duration	Issue Age				
	< = 45	55	65	75	> = 84
1	154.0%	88.0%	60.5%	75.9%	110.0%
2	149.6%	86.9%	61.6%	78.1%	110.0%
3	145.2%	85.8%	62.7%	81.4%	110.0%
4	140.8%	84.7%	63.8%	84.7%	110.0%
5	136.4%	83.6%	66.0%	88.0%	110.0%
6	133.1%	81.4%	68.2%	92.4%	110.0%
7	129.8%	79.2%	70.4%	96.8%	110.0%
8	126.5%	74.8%	71.5%	101.2%	110.0%
9	123.2%	70.4%	72.6%	105.6%	110.0%
10	119.9%	66.0%	73.7%	110.0%	110.0%
11	116.6%	61.6%	75.9%	110.0%	110.0%
12	114.4%	62.7%	78.1%	110.0%	110.0%
13	112.2%	63.8%	81.4%	110.0%	110.0%
14	110.0%	66.0%	84.7%	110.0%	110.0%
15	105.6%	67.1%	88.0%	110.0%	110.0%
16	99.9%	67.0%	90.7%	108.0%	108.0%
17	94.8%	67.8%	93.3%	106.0%	106.0%
18	90.4%	67.6%	95.7%	104.0%	104.0%
19	86.4%	67.3%	97.9%	102.0%	102.0%
20	82.8%	67.0%	100.0%	100.0%	100.0%
21	81.3%	69.0%	100.0%	100.0%	100.0%
22	80.0%	71.0%	100.0%	100.0%	100.0%
23	79.1%	74.0%	100.0%	100.0%	100.0%
24	78.6%	77.0%	100.0%	100.0%	100.0%
25	84.0%	80.0%	100.0%	100.0%	100.0%
26	88.0%	84.0%	100.0%	100.0%	100.0%
27	92.0%	88.0%	100.0%	100.0%	100.0%
28	96.0%	92.0%	100.0%	100.0%	100.0%
29	98.0%	96.0%	100.0%	100.0%	100.0%
30+	100.0%	100.0%	100.0%	100.0%	100.0%

Factors for ages not listed above are interpolated.

We are also projecting 12 years of future mortality improvement based on scale AA, consistent with the 12 years of future morbidity improvement in our future claim projections.

Expenses

Expenses have not been explicitly projected. It is assumed that the originally filed expense assumptions remain appropriate.

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**6. Trend Assumptions**

As this is not medical insurance, we have not included any explicit medical cost trends in the projections.

**7. Marketing Method**

The employees and other eligibles were marketed through the Employer, Union or Association as part of their corporate sponsored employee benefits package with the support of John Hancock representatives and direct mail.

**8. Underwriting**

Actively at Work employees were generally offered coverage on a Guaranteed Acceptance basis during limited enrollment periods. Other eligibles were underwritten using either simplified (short form) or full underwriting.

**9. Premium Classes**

The base policy premium rates vary by Issue age, LMB, and Inflation Option, as in the initial rate filing.

All premium factors related to the insured elected benefit design options, case size, commissions, or underwriting risk class remain unchanged from the initial rate filing, with the following exception: There was a 20% load on post issue date optional coverage increases to the insured's DMB. Our current new business rates do not include this load on post issue date option coverage. To maintain consistency with our current new business pricing, both the past and future optional coverage increases will no longer be loaded by 20%.

**10. Premium Modalization Rules**

Premiums are payable through payroll deduction, direct bill or automatic bank withdrawal. Monthly premium rates are illustrated in Appendices A, B, and C. The following factors are used to illustrate other modes, if applicable.

<b>Frequency</b>	<b>Multiple of Monthly Premium</b>
Monthly	1
Quarterly	3
Semi-annual	6
Annual	12

**11. Issue Age Range**

The issue age range is 18+ for all policy forms.

**12. Area Factors**

Area factors are not applicable to any of the policy forms or optional benefits.

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### 13. Average Annual Premium

The table below summarizes the average annual premium per certificate before and after the requested increase.

<b>Form</b>	<b>Nationwide</b>	<b>Pennsylvania</b>	
	before the rate increase	before the rate increase	after the rate increase
GPB-COV-0002	1,140	890	965

### 14. Number of Certificate Holders

The table below summarizes, as of 12/31/2015, the number of certificates inforce and their 2015 annualized premium that will be affected by this rate increase in your state.

<b>Form</b>	<b>Number of Certificates</b>	<b>2015 Annualized Premium</b>
GPB-COV-0002	46	40,996

### 15. Reserves

Active Life Reserves have not been used in this rate increase demonstration. Minimum Statutory Claim reserves as of 12/31/2015 have been discounted to the date of incurral of each respective claim and included in the historical incurred claims. Incurred But Not Reported claim reserves as of 12/31/2015 have also been allocated to the calendar year of incurral and included in historic incurred claims.

### 16. Requested Rate Increase

The Company is requesting an average rate increase of 8.4%, which ranges from -5.3% to 13.5%. Rate increases were derived as follows:

1. The Company first determined the projected lifetime loss ratio for this form based on nationwide actual experience and projected future experience assuming all prior rate increase requests were approved in full and within three months of the original filing date. We then determined that an average rate increase amount of 8.4%, ranging from -5.3% to 13.5% (see Section 9 on why 20% load was removed on post issue date optional coverage increases to the insured's DMB), would be needed in order to revert to the lifetime loss ratio certified to in our 2010 inforce rate increase filing for this form.
2. We are no longer selling new business under this policy form, but we ensured that the proposed rate increases did not result in premium rates that exceed what could be reasonably estimated as new business rates for our Group forms. We determined such rates by applying a series of factors to the P-FACE(2009) policy form premium rates (which were the last set of Group LTC premium rates that were sold). One factor applied to P-FACE(2009) premium rates was a ratio of the most recent Traditional Retail premium rates filed in the Interstate Compact prior to Performance LTC (ICC12-LTC-12, filed in 2014) relative to the Retail LTC rates filed in 2010 (LTC-03). This was done because we believe that if new business for Group Long-Term Care was still being sold, premium rates would have increased by a comparable amount to our Retail business since 2010. Rates were increased by an additional 9.5% across the board, accounting for the average increase to premium rates for ICC12-LTC-12 if they were still being sold in 2016 since a 2016 experience study showed a need to raise rates by 9.5%. There is no impact to our proposed rate increase since our proposed premium rates fall below our assumed new business rates. These rates were then further adjusted for benefit differences and changes in underwriting guidelines and risk classification (this is demonstrated in **Appendix A**). After the application of this restriction the average rate increase for the forms listed in this memo is 8.4%, ranging from -5.3% to 13.5%.

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3. We ensured that the resulting overall increase in rates satisfied the rate stability rule ensuring no less than an 85% loss ratio on the rate increase portion, while applying the original loss ratio on the original rate schedule (as the original loss ratio was higher than 58%). This is demonstrated at the bottom of **Exhibit 1** where it can be seen that the sum of past and future projected incurred claims is not less than the sum of the original premium times the original loss ratio and the rate increase premium times the 85% loss ratio requirement.

**Appendix B1** contains the new proposed rate tables for all policy forms included with this filing for those certificate holders that *did not* elect an inflation reduction option as part of the 2010 rate increase filings.

Some of our older group clients have certificates inforce under different policy forms, having opted for upgrading their pre-existing employee benefit plan to a new plan covered under a newer policy form. In those situations, we have offered internal replacement (plan upgrade) opportunities to existing certificate holders, whereby a certificate holder may have elected to lapse their original coverage and purchase the new plan coverage as a replacement. In those situations, the insured would be subject to the attained age (at the time of the replacement) premium rates for their new coverage but in some situations we would provide a premium credit to recognize the premium they had paid since their issue age for their original coverage under the prior plan. For these insureds, we will determine their new premium rate based on their historical original issue ages respectively for each layer of coverage. In a situation where the resulting rate increases are greater than those listed in Appendix A for their coverage, we will continue to offer them a premium credit in order to limit their respective rate increases to the amounts listed in Appendix A.

For those group clients that transferred to us from an external carrier, we will continue to recognize any assets transferred from the prior carrier. We will continue to provide these credits to the insureds within those groups and the rate increase will be calculated based on the insureds' net premium rate.

## **17. Analysis Performed**

The initial premium schedule was based on the originally filed pricing assumptions which were believed to be appropriate, given company and industry experience available, when the initial rate schedule was developed.

The original pricing assumptions for morbidity, voluntary termination rates, and mortality were as follows:

### Morbidity

In developing claim cost assumptions, reference was made to the 1985 National Nursing Home Survey (TSA, 88-90 Reports), the 1982 and 1984 National Long-Term Care Surveys, the Channeling Demonstration, and the 1987 National Medical Expenditure Survey.

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Below are the original sample annual claim costs for a GPB-COV-0002 policy, \$10 daily benefit, and 5yr LMB:

Issue Age 45		
Age	FPO	ABI
45	7.29	8.11
50	5.91	8.38
55	8.92	16.19
60	12.53	28.98
65	23.03	67.08
70	46.75	171.82
75	89.96	419.63
80	186.77	1,106.87
85	361.30	2,725.70
90	647.45	6,216.95

Issue Age 50		
Age	FPO	ABI
50	6.84	7.61
55	8.79	12.51
60	12.36	22.39
65	22.71	51.82
70	46.09	132.74
75	88.70	324.20
80	184.16	855.14
85	356.25	2,105.81
90	638.40	4,803.06

Issue Age 60		
Age	FPO	ABI
60	13.63	15.16
65	22.01	30.84
70	44.67	78.99
75	85.97	192.91
80	178.49	508.83
85	345.29	1,253.01
90	618.76	2,857.94

### Voluntary Terminations

The initial premium schedule was based on the originally filed pricing assumptions which were believed to be appropriate, given company and industry experience available, when the initial rate schedule was developed.

Duration	All Issue Ages
1	8.00%
2	6.00%
3	4.00%
4+	3.50%

### Mortality

Pricing mortality rates were calculated as a 67% female / 33% male combination of the 1975-80 Basic Mortality Table:

Duration	Selection Factor
1	50.0%
2	80.0%

**The following tables show in aggregate how our new assumptions (excluding the moderately adverse margin) compare to actual experience:**

### Morbidity

Experience period: Inception through 9/30/2012 for incidence, inception through 9/30/2011 for claim terminations and salvage



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The following charts show key experience compared to revised assumptions.

**Incidence**

<b>Duration</b>	<b>A/E</b>
1-3	114%
4-6	106%
7-9	99%
10+	100%
<b>Total</b>	<b>102%</b>

**Claim Terminations**

<b>Continuance</b>	<b>A/E</b>
<b>Total</b>	<b>99%</b>

**Salvage**

<b>Amount Paid</b>	<b>A/E</b>
<b>Total</b>	<b>103%</b>

While we usually complete triennial studies, we found that our quarterly morbidity A/E from Q3-2013 to Q2-2015 (the point at which we would have started the next study) averaged 100%. Therefore, we are still comfortable with the assumptions set based on 2012 data.

**Voluntary Lapses**

Experience period: 4/1/2009-3/31/2012

<b>Duration</b>	<b>A/E by Amount</b>	
	<b>UW</b>	<b>GI</b>
1	73%	100%
2	72%	101%
3-5	84%	97%
6-10	93%	103%
11+	100%	100%
<b>Total</b>	<b>85%</b>	<b>100%</b>

We increased ultimate lapse rates slightly (in the range of 0.1% to 0.2%), consistent with experience, which slightly lowered the loss ratio.

Note that we are no longer selling Group business. Early durations are no longer applicable.

**Mortality**

Experience period: 4/1/2009-3/31/2012

<b>Duration</b>	<b>A/E by Amount</b>	
	<b>UW</b>	<b>GI</b>
1-5	118%	105%
6-10	105%	104%
11-15	92%	101%
16+	98%	94%
<b>Total</b>	<b>100%</b>	<b>101%</b>

While we usually complete triennial studies, we found that our quarterly termination A/E from Q3-2013 to Q2-2015 (the point at which we would have started the next study) averaged 99%. Therefore, we are still comfortable with the assumptions set based on 2012 data.

**John Hancock Life Insurance Company (U.S.A.)**  
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## **18. Experience – Past & Future**

**Exhibit 1** contains nationwide past premium and claims experience and future premium and claim projections and illustrates that the anticipated lifetime loss ratio with the requested rate increase is 80.1%, well in excess of the minimum loss ratio of 60% as well as greater than the original pricing loss ratio of 77.6%. The lifetime loss ratio as of 12/31/2015 is calculated as the sum of accumulated past and discounted future claims divided by the sum of accumulated past and discounted future earned premium where accumulation and discounting occur at the maximum statutory valuation discount rate. In Exhibit 1, the proposed rate increase is applied historically (starting in calendar year 2012). Please refer to the cover letter for background on this modeling assumption.

In addition, **Exhibit 1** contains the original expected loss ratio projections, adjusted for the actual mix of business issued, with the lifetime loss ratio also calculated as stated above.

Furthermore, **Exhibit 1** demonstrates that the sum of the accumulated value of incurred claims without the inclusion of active life reserves, and the present value of future projected incurred claims, without the inclusion of active life reserves, will not be less than the sum of the following:

1. Accumulated value of the initial earned premium times the original assumed lifetime loss ratio (which was higher than 58%),
2. 85% of the accumulated value of prior premium rate schedule increases,
3. Present value of future projected initial earned premium times the original assumed lifetime loss ratio, and
4. 85% of the present value of future projected premium in excess of the projected initial earned premium.

Note that rate increases will only apply once the applicable group policy rate guarantee has expired.

## **19. History of Previous Rate Revisions**

There was a rate increase requested in 2010 on this plan. However, because it only impacted certain benefit periods and inflation options, no certificateholders situated in your state were impacted. Because the loss ratio is based on nationwide data and all benefit period/inflation options, we have assumed for the purposes of this filing that the 2010 rate increase was approved on time and in full by every state.

## **20. Ensuring No Cross-Subsidization Between States**

We have ensured no state's rate increase approvals will subsidize other states' experience. Rate increases will vary by state, but only to reflect the timing and amount of prior rate increases approved by that state. This is accomplished by first backing-out all prior rate increases from our nationwide premium data. We then re-introduce prior rate increases with the amount and timing based on your state's prior approvals (as detailed in Section 19). The current proposed rate increases are then determined based on the amounts needed in order to achieve our target loss ratios where our targets reflect the lifetime loss ratios certified to in our prior filing.

Although some states may have capped our previous inforce rate increase filings, in each case this was done with the understanding that the full amount of the proposed rate increases were justified and that John Hancock would be re-filing for the remainder at a later date. In instances where the remainder remains unapproved, it has been included in the current filings.

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**21. Past Losses Testing**

Preventing companies from recouping past losses was the subject of a recent discussion by the NAIC in late 2013. The accepted methodology, which was incorporated into the 2014 LTC Model Regulation, defines past losses as actual past claims less expected past claims when determining loss ratio compliance where expected past claims are defined as the following:

Expected claims shall be calculated based on the original filing assumptions assumed until new assumptions are filed as part of a rate increase. New assumptions shall be used for all periods beyond each requested effective date of a rate increase regardless of whether or not the rate increase is approved. Expected claims are calculated for each calendar year based on the in-force during the calendar year. Expected claims shall include margins for moderately adverse experience; the margins included in the claims that were used to determine the lifetime loss ratio consistent with the original filing or as modified in any rate increase filing.

We apply this methodology in **Exhibit 1A**. The ‘Adjusted Expected Incurred Claims’ are initially calculated by applying the original pricing loss ratio to the actual earned premium in a given calendar year. Later, in years in which we filed for inforce rate increases, expected incurred claims are based on the new assumptions that were filed at that time.

**22. Proposed Effective Date**

These rates will not be effective until after we have satisfied the required 60 days advance notice to the policyholder and to the insureds.

**John Hancock Life Insurance Company (U.S.A.)**  
**Actuarial Memorandum for Inforce Rate Increase – Group Long-Term Care Policy Series**  
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**23. Actuarial Certification**

I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries, and I meet the Academy's qualification standards for rendering this opinion and am familiar with the requirements for filing long-term care insurance premiums and filing for increases in long-term care insurance premiums. This memorandum has been prepared in conformity with all applicable Actuarial Standards of Practice, including ASOP No. 8.

The preceding Actuarial Memorandum contains:

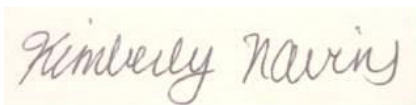
- a) the assumptions on which this certification is based;
- b) the adjustments to prior assumptions with an explanation of the reasons previous assumptions were not realized;
- c) a lifetime projection of the prior premium rate schedules and incurred claims plus future expected premiums and claims which demonstrates that the revised premium rate schedule meets the loss ratios standards and necessary details of this state; and
- d) disclosure of the manner, if any, in which reserves have been recognized.

If the requested premium rate schedule increase is implemented and the underlying assumptions which reflect moderately adverse conditions are realized, no further premium rate schedule increases are anticipated.

I have reviewed and taken into consideration the policy design and coverage provided, and our current underwriting and claims adjudication processes.

In forming my opinion, I have used actuarial assumptions and actuarial methods and such tests of the actuarial calculations as I considered necessary. Based on these assumptions or statutory requirements where necessary, the premium rate filing is in compliance with the loss ratio standards of this state.

The basis for contract reserves has been previously filed and there is no anticipation of any changes.



Kimberly Navins, FSA, MAAA  
Actuary  
John Hancock Life Insurance Company (U.S.A.)

**Exhibit 1: Nationwide Loss Ratio Exhibit  
Group Long-Term Care (GPB-Cov-0002)**

Calendar Year	Original Assumptions			Historical & Projected Experience					
	Incurred Claims	Earned Premium	Incurred Loss Ratio	Before Proposed Increase			With Proposed Rate Increase		
				Incurred Claims	Earned Premium	Incurred Loss Ratio	Incurred Claims	Earned Premium	Incurred Loss Ratio
1990	-	-	-	-	10,600	0%	-	10,600	0%
1991	-	-	-	-	13,706	0%	-	13,706	0%
1992	-	-	-	-	130,947	0%	-	130,947	0%
1993	24,454	281,316	9%	-	452,593	0%	-	452,593	0%
1994	27,056	277,767	10%	-	485,283	0%	-	485,283	0%
1995	30,873	260,385	12%	2,362	529,250	0%	2,362	529,250	0%
1996	39,951	275,694	14%	-	571,865	0%	-	571,865	0%
1997	60,502	340,026	18%	1,018	701,676	0%	1,018	701,676	0%
1998	406,653	2,172,502	19%	1,313,565	2,608,033	50%	1,313,565	2,608,033	50%
1999	1,375,485	7,817,601	18%	1,187,766	8,837,184	13%	1,187,766	8,837,184	13%
2000	2,329,223	13,484,244	17%	2,259,297	13,158,860	17%	2,259,297	13,158,860	17%
2001	2,460,490	14,457,922	17%	1,257,275	14,097,318	9%	1,257,275	14,097,318	9%
2002	2,722,355	14,703,453	19%	703,751	14,385,372	5%	703,751	14,385,372	5%
2003	3,210,454	15,177,636	21%	1,915,689	14,975,334	13%	1,915,689	14,975,334	13%
2004	3,738,588	15,637,115	24%	4,384,408	15,549,321	28%	4,384,408	15,549,321	28%
2005	4,267,186	16,245,505	26%	2,274,982	16,365,989	14%	2,274,982	16,365,989	14%
Historical Experience	2006	4,751,223	16,735,040	3,412,276	17,134,513	20%	3,412,276	17,134,513	20%
	2007	5,649,022	19,785,983	2,930,445	20,443,071	14%	2,930,445	20,443,071	14%
	2008	6,409,192	21,943,336	5,635,647	22,839,876	25%	5,635,647	22,839,876	25%
	2009	6,996,212	22,353,012	7,391,751	23,661,335	31%	7,391,751	23,661,335	31%
	2010	7,665,257	22,493,869	10,315,052	24,308,205	42%	10,315,052	24,308,205	42%
	2011	8,398,064	22,672,561	7,630,583	24,953,275	31%	7,630,583	24,953,275	31%
	2012	9,218,261	23,074,476	6,353,771	26,492,112	24%	6,353,771	27,774,106	23%
	2013	9,984,633	22,542,561	8,147,104	26,448,191	31%	8,147,104	27,698,829	29%
	2014	10,856,997	22,468,465	11,900,827	27,056,178	44%	11,900,827	28,284,570	42%
	2015	11,838,133	22,923,431	13,947,743	28,200,539	49%	13,947,743	30,519,537	46%
Projected Future Experience	2016	12,661,559	21,680,735	11,214,553	27,602,710	41%	11,220,309	29,859,942	38%
	2017	13,512,298	20,371,206	12,509,192	26,905,225	46%	12,483,421	28,994,449	43%
	2018	14,391,599	19,138,785	13,987,417	26,210,290	53%	13,865,045	28,033,527	49%
	2019	15,281,761	17,954,654	15,622,311	25,510,229	61%	15,492,880	27,283,815	57%
	2020	16,165,566	16,808,883	17,311,273	24,798,055	70%	17,172,676	26,522,137	65%
	2021	17,027,132	15,700,846	18,990,141	24,069,233	79%	18,841,047	25,743,545	73%
	2022	17,898,591	14,631,066	20,762,310	23,320,771	89%	20,600,440	24,944,745	83%
	2023	18,774,991	13,599,651	22,694,873	22,550,279	101%	22,517,544	24,123,068	93%
	2024	19,609,276	12,607,286	24,672,780	21,755,739	113%	24,478,890	23,276,295	105%
	2025	20,407,533	11,654,578	26,641,808	20,935,024	127%	26,430,933	22,402,095	118%
	2026	21,160,319	10,741,716	28,548,959	20,087,362	142%	28,321,274	21,499,556	132%
	2027	21,877,203	9,869,599	30,446,563	19,213,398	158%	30,201,601	20,569,265	147%
	2028	22,542,544	9,039,181	32,511,190	18,314,489	178%	32,246,644	19,612,587	164%
	2029	23,076,050	8,250,828	34,530,123	17,392,660	199%	34,246,252	18,631,572	184%
	2030	23,505,518	7,504,655	36,421,638	16,454,131	221%	36,119,521	17,632,721	205%
	2031	23,823,899	6,801,083	38,197,539	15,504,553	246%	37,878,042	16,621,941	228%
	2032	24,033,545	6,140,524	39,800,770	14,548,784	274%	39,465,275	15,604,289	253%
	2033	24,141,451	5,522,687	40,965,786	13,591,825	301%	40,618,614	14,584,976	278%
	2034	24,080,205	4,947,039	41,703,023	12,639,291	330%	41,348,224	13,569,883	305%
	2035	23,904,347	4,413,346	42,398,520	11,696,804	362%	42,035,745	12,564,928	335%
	2036	23,581,205	3,920,744	42,910,425	10,770,137	398%	42,540,970	11,576,185	367%
	2037	23,141,315	3,468,223	43,081,909	9,865,794	437%	42,708,759	10,610,563	403%
	2038	22,601,899	3,054,533	42,917,195	8,991,267	477%	42,543,355	9,676,089	440%
	2039	21,937,576	2,678,216	42,605,148	8,151,524	523%	42,231,557	8,778,070	481%
	2040	21,201,322	2,338,072	41,989,346	7,350,791	571%	41,618,776	7,921,059	525%
	2041	20,345,058	2,032,473	40,898,378	6,593,097	620%	40,535,556	7,109,414	570%
	2042	19,397,620	1,758,836	39,511,068	5,882,084	672%	39,158,716	6,347,086	617%
<b>Values as of 12/31/2015 (discounted at maximum statutory valuation rates)</b>									
Past :	135,910,788	451,883,061	30.1%	120,516,105	484,587,308	24.9%	120,516,105	491,139,837	24.5%
Future :	360,549,501	187,541,196	192.3%	552,393,354	319,578,153	172.9%	547,863,277	342,998,824	159.7%
Lifetime :	496,460,289	639,424,258	77.6%	672,909,459	804,165,461	83.7%	668,379,382	834,138,661	80.1%

**Total Incurred Claims exceed Total Initial Premiums x max(58%, Original Pricing Loss Ratio) + Increased Premiums x max(85%, Original Pricing Loss Ratio)**

Accum. Value of Past Incurred Claims =	120,516,105		Accum Value of Past Initial Prm x 77.6% =	373,942,349
Present Value of Future Incurred Claims =	547,863,277		Present Value of Future Initial Prm x 77.6% =	238,999,151
Total =	668,379,382	>=	Accum Value of Prior Increases x 85.0% =	8,087,403
			Present Value of Future Increases x 85.0% =	29,899,520
			Total =	650,928,423

Exhibit 1A: Pass Losses Exhibit  
Group Long-Term Care (GPB-Cov-0002)

	Calendar Year	Loss Ratios to Apply to Actual Premium			Adjusted Expected Incurred Claims	Before Proposed Increase			With Proposed Rate Increase		
		Incurred Claims	Earned Premium	Incurred Loss Ratio*		Incurred Claims	Earned Premium	Incurred Loss Ratio*	Incurred Claims	Earned Premium	Incurred Loss Ratio*
Original Pricing	1993	24,454	281,316	9%	39,343	0	452,593	0%	0	452,593	0%
	1994	27,056	277,767	10%	47,270	0	485,283	0%	0	485,283	0%
	1995	30,873	260,385	12%	62,751	2,362	529,250	0%	2,362	529,250	0%
	1996	39,951	275,694	14%	82,870	0	571,865	0%	0	571,865	0%
	1997	60,502	340,026	18%	124,852	1,018	701,676	0%	1,018	701,676	0%
	1998	406,653	2,172,502	19%	488,176	1,313,565	2,608,033	50%	1,313,565	2,608,033	50%
	1999	1,375,485	7,817,601	18%	1,554,878	1,187,766	8,837,184	13%	1,187,766	8,837,184	13%
	2000	2,329,223	13,484,244	17%	2,273,017	2,259,297	13,158,860	17%	2,259,297	13,158,860	17%
	2001	2,460,490	14,457,922	17%	2,399,122	1,257,275	14,097,318	9%	1,257,275	14,097,318	9%
	2002	2,722,355	14,703,453	19%	2,663,462	703,751	14,385,372	5%	703,751	14,385,372	5%
	2003	3,210,454	15,177,636	21%	3,167,662	1,915,689	14,975,334	13%	1,915,689	14,975,334	13%
	2004	3,738,588	15,637,115	24%	3,717,598	4,384,408	15,549,321	28%	4,384,408	15,549,321	28%
	2005	4,267,186	16,245,505	26%	4,298,833	2,274,982	16,365,989	14%	2,274,982	16,365,989	14%
	2006	4,751,223	16,735,040	28%	4,864,636	3,412,276	17,134,513	20%	3,412,276	17,134,513	20%
	2007	5,649,022	19,785,983	29%	5,836,625	2,930,445	20,443,071	14%	2,930,445	20,443,071	14%
2010 RI	2008	6,409,192	21,943,336	29%	6,671,052	5,635,647	22,839,876	25%	5,635,647	22,839,876	25%
	2009	6,996,212	22,353,012	31%	7,405,701	7,391,751	23,661,335	31%	7,391,751	23,661,335	31%
	2010	6,050,219	22,647,756	27%	6,493,798	10,315,052	24,308,205	42%	10,315,052	24,308,205	42%
	2011	6,418,138	21,655,787	30%	7,395,416	7,630,583	24,953,275	31%	7,630,583	24,953,275	31%
	2012	7,078,243	21,030,369	34%	8,916,515	6,353,771	26,492,112	24%	6,353,771	27,774,106	23%
	2013	7,769,896	21,211,382	37%	9,688,181	8,147,104	26,448,191	31%	8,147,104	27,698,829	29%
Projected Future Experience	2014	8,502,663	20,607,456	41%	11,163,414	11,900,827	27,056,178	44%	11,900,827	28,284,570	42%
	2015	9,325,474	20,013,051	47%	13,140,594	13,947,743	28,200,539	49%	13,947,743	30,519,537	46%
	2016					11,214,553	27,602,710	41%	11,220,309	29,859,942	38%
	2017					12,509,192	26,905,225	46%	12,483,421	28,994,449	43%
	2018					13,987,417	26,210,290	53%	13,865,045	28,033,527	49%
	2019					15,622,311	25,510,229	61%	15,492,880	27,283,815	57%
	2020					17,311,273	24,798,055	70%	17,172,676	26,522,137	65%
	2021					18,990,141	24,069,233	79%	18,841,047	25,743,545	73%
	2022					20,762,310	23,320,771	89%	20,600,440	24,944,745	83%
	2023					22,694,873	22,550,279	101%	22,517,544	24,123,068	93%
	2024					24,672,780	21,755,739	113%	24,478,890	23,276,295	105%
	2025					26,641,808	20,935,024	127%	26,430,933	22,402,095	118%
	2026					28,548,959	20,087,362	142%	28,321,274	21,499,556	132%
	2027					30,446,563	19,213,398	158%	30,201,601	20,569,265	147%
	2028					32,511,190	18,314,489	178%	32,246,644	19,612,587	164%
	2029					34,530,123	17,392,660	199%	34,246,252	18,631,572	184%
	2030					36,421,638	16,454,131	221%	36,119,521	17,632,721	205%
	2031					38,197,539	15,504,553	246%	37,878,042	16,621,941	228%
	2032					39,800,770	14,548,784	274%	39,465,275	15,604,289	253%
	2033					40,965,786	13,591,825	301%	40,618,614	14,584,976	278%
	2034					41,703,023	12,639,291	330%	41,348,224	13,569,883	305%
	2035					42,398,520	11,696,804	362%	42,035,745	12,564,928	335%
	2036					42,910,425	10,770,137	398%	42,540,970	11,576,185	367%
	2037					43,081,909	9,865,794	437%	42,708,759	10,610,563	403%
	2038					42,917,195	8,991,267	477%	42,543,355	9,676,089	440%
	2039					42,605,148	8,151,524	523%	42,231,557	8,778,070	481%
	2040					41,989,346	7,350,791	571%	41,618,776	7,921,059	525%
	2041					40,898,378	6,593,097	620%	40,535,556	7,109,414	570%
	2042					39,511,068	5,882,084	672%	39,158,716	6,347,086	617%
	2043					38,028,912	5,220,203	728%	37,687,696	5,636,780	669%
	2044					36,523,928	4,608,276	793%	36,193,832	4,979,465	727%
	2045					34,904,419	4,046,394	863%	34,586,610	4,375,355	790%
Value as of 12/31/15*:					133,205,149	120,516,105	484,587,308	24.9%	120,516,105	491,139,837	24.5%
Past						552,393,354	319,578,153	172.9%	547,863,277	342,998,824	159.7%
Future						672,909,459	804,165,461	83.7%	668,379,382	834,138,661	80.1%
Lifetime											

\*discounted at maximum statutory valuation rates

Test: Total Incurred Claims exceeds the Total Initial Premiums x Original Pricing Loss Ratio (instead of 58%) + Increased Premiums x 85%

Accum Value of Minimum (Past Incurred Claims,			Accum Value of Past Initial Prm x 77.6% =	373,942,349
Adjusted Originally Expected Incurred Claims) =	120,516,105		Present Value of Future Initial Prm x 77.6% =	238,999,151
Present Value of Future Incurred Claims =	547,863,277		Accum Value of Prior Increases x 85.0% =	8,087,403
Total =	668,379,382	> =	Present Value of Future Increases x 85.0% =	29,899,520
			Total	650,928,423

Appendix A - Comparison to New Business Rates (GPB-COV-0002)  
Rates are shown for a 90-day EP, 60% HHC benefit, and are per \$5 (for a \$200 monthly benefit)

Inflation Option: Future Purchase Option

New Business Rates adjusted for Benefit Differences\* :

Issue Age	Benefit Period					
	2	3	5	6	7	10
18-29	0.80	0.92	1.00	1.12	1.18	1.96
30	0.84	0.97	1.06	1.17	1.24	1.96
31	0.90	1.03	1.06	1.17	1.24	1.96
32	0.90	1.03	1.10	1.23	1.30	2.01
33	0.90	1.03	1.10	1.23	1.30	2.01
34	0.90	1.03	1.16	1.29	1.37	2.14
35	0.90	1.03	1.16	1.29	1.37	2.15
36	0.90	1.03	1.16	1.29	1.37	2.17
37	0.90	1.03	1.23	1.36	1.44	2.17
38	0.90	1.04	1.23	1.37	1.45	2.33
39	0.90	1.04	1.23	1.39	1.47	2.38
40	0.90	1.04	1.24	1.40	1.48	2.42
41	0.93	1.11	1.27	1.44	1.53	2.51
42	0.93	1.12	1.38	1.58	1.67	2.61
43	1.00	1.22	1.41	1.62	1.72	2.71
44	1.11	1.24	1.54	1.68	1.78	2.83
45	1.21	1.35	1.58	1.83	1.94	2.96
46	1.22	1.38	1.65	1.91	2.02	3.11
47	1.35	1.52	1.71	2.00	2.11	3.27
48	1.48	1.57	1.88	2.20	2.32	3.46
49	1.50	1.71	1.96	2.30	2.43	3.52
50	1.65	1.77	2.04	2.42	2.55	3.74
51	1.71	1.85	2.19	2.59	2.74	3.91
52	1.88	2.05	2.32	2.78	2.94	4.23
53	1.96	2.16	2.59	3.10	3.28	4.46
54	2.17	2.41	2.76	3.32	3.51	4.69
55	2.25	2.53	2.95	3.57	3.77	4.95
56	2.38	2.76	3.14	3.79	4.01	5.36
57	2.54	2.87	3.34	4.02	4.25	5.66
58	2.72	3.12	3.55	4.18	4.42	6.02
59	2.77	3.29	3.82	4.48	4.74	6.41
60	2.99	3.48	4.12	4.71	4.98	6.88
61	3.20	3.82	4.43	5.12	5.42	7.47
62	3.44	4.06	4.80	5.62	5.94	8.19
63	3.63	4.50	5.23	6.17	6.52	8.86
64	3.96	4.85	5.72	6.83	7.22	9.67
65	4.22	5.28	6.16	7.42	7.84	10.57
66	4.65	5.75	6.73	7.93	8.38	11.45
67	5.03	6.22	7.29	8.41	8.90	12.34
68	5.51	6.64	7.97	9.04	9.56	13.42
69	6.06	7.31	8.68	9.57	10.12	14.43
70	6.62	7.84	9.40	10.25	10.83	15.65
71	7.34	8.66	10.43	11.14	11.78	17.54
72	8.12	9.51	11.57	12.15	12.84	19.63
73	8.98	10.48	12.77	13.28	14.04	21.96
74	10.02	11.55	14.25	14.49	15.32	24.62
75	11.04	12.77	15.75	15.85	16.75	27.56
76	12.27	14.41	17.93	17.97	19.00	31.10
77	13.72	16.33	20.26	20.39	21.55	35.33
78	15.31	18.36	23.03	23.15	24.47	39.88
79	17.11	20.77	26.08	26.22	27.72	45.19
80	28.37	23.41	29.61	29.79	31.50	51.06
81	30.63	25.72	32.58	32.81	34.68	56.13
82	32.72	27.80	35.21	35.49	37.52	60.71
83	35.54	31.06	39.36	39.63	41.90	67.85
84	38.15	33.98	43.17	43.45	45.94	74.33

GPB-COV-0002 Rates after Requested Rate Increases  
excluding additional rate increase due to cost of delay :

Issue Age	Benefit Period					
	2	3	5	6	7	10
18-29	0.32	0.38	0.44	0.46	0.48	0.56
30	0.32	0.38	0.44	0.46	0.48	0.56
31	0.32	0.38	0.44	0.46	0.48	0.56
32	0.32	0.38	0.44	0.46	0.48	0.56
33	0.33	0.40	0.46	0.49	0.50	0.59
34	0.35	0.41	0.48	0.51	0.53	0.62
35	0.36	0.43	0.51	0.53	0.55	0.65
36	0.38	0.45	0.53	0.56	0.58	0.68
37	0.40	0.47	0.56	0.58	0.60	0.71
38	0.41	0.50	0.58	0.61	0.63	0.75
39	0.43	0.52	0.61	0.64	0.66	0.78
40	0.45	0.54	0.64	0.67	0.70	0.82
41	0.48	0.58	0.69	0.72	0.75	0.88
42	0.52	0.62	0.74	0.77	0.80	0.94
43	0.55	0.67	0.79	0.83	0.86	1.01
44	0.59	0.72	0.85	0.89	0.92	1.09
45	0.64	0.77	0.91	0.95	0.99	1.16
46	0.68	0.83	0.97	1.02	1.06	1.25
47	0.73	0.89	1.05	1.10	1.14	1.34
48	0.78	0.95	1.12	1.18	1.22	1.44
49	0.84	1.02	1.20	1.26	1.31	1.54
50	0.90	1.09	1.29	1.36	1.40	1.65
51	0.96	1.17	1.39	1.46	1.51	1.77
52	1.03	1.26	1.49	1.56	1.62	1.90
53	1.10	1.35	1.59	1.68	1.73	2.04
54	1.18	1.45	1.71	1.80	1.86	2.19
55	1.27	1.55	1.84	1.93	2.00	2.34
56	1.36	1.66	1.97	2.07	2.14	2.51
57	1.46	1.79	2.11	2.22	2.30	2.70
58	1.64	2.01	2.38	2.50	2.58	3.03
59	1.84	2.26	2.67	2.81	2.90	3.40
60	2.07	2.54	3.01	3.16	3.26	3.82
61	2.33	2.86	3.38	3.55	3.66	4.29
62	2.62	3.22	3.80	3.99	4.12	4.82
63	2.95	3.62	4.28	4.48	4.63	5.41
64	3.32	4.07	4.81	5.04	5.20	6.04
65	3.73	4.58	5.41	5.67	5.84	6.57
66	4.20	5.15	6.08	6.37	6.57	7.17
67	4.72	5.80	6.84	7.16	7.38	7.81
68	5.17	6.35	7.49	7.84	8.09	8.52
69	5.65	6.95	8.20	8.59	8.86	9.30
70	6.18	7.61	8.99	9.41	9.70	10.18
71	6.76	8.33	9.84	10.31	10.62	11.37
72	7.39	9.12	10.78	11.29	11.64	12.77
73	8.13	10.04	11.87	12.43	12.81	14.34
74	8.93	11.05	13.08	13.69	14.10	16.10
75	9.82	12.16	14.40	15.07	15.52	18.06
76	10.79	13.39	15.85	16.59	17.09	19.87
77	11.86	14.74	17.46	18.27	18.81	21.87
78	11.86	14.74	17.46	18.27	18.81	21.67
79	11.86	14.74	17.46	18.27	18.81	20.69
80	11.86	14.74	17.46	18.27	18.81	19.70
81	11.86	14.74	17.46	18.27	18.81	19.70
82	11.86	14.74	17.46	18.27	18.81	19.70
83	11.86	14.74	17.46	18.27	18.81	19.70
84	11.86	14.74	17.46	18.27	18.81	19.70

GPB-COV-0002 Rates after Requested Rate Increases  
including additional rate increase due to cost of delay :

Issue Age	Benefit Period					
	2	3	5	6	7	10
18-29	0.32	0.38	0.44	0.46	0.48	0.56
30	0.32	0.38	0.44	0.46	0.48	0.56
31	0.32	0.38	0.44	0.46	0.48	0.56
32	0.32	0.38	0.44	0.46	0.48	0.56
33	0.33	0.40	0.46	0.49	0.50	0.59
34	0.35	0.41	0.48	0.51	0.53	0.62
35	0.36	0.43	0.51	0.53	0.55	0.65
36	0.38	0.45	0.53	0.56	0.58	0.68
37	0.40	0.47	0.56	0.58	0.60	0.71
38	0.41	0.50	0.58	0.61	0.63	0.75
39	0.43	0.52	0.61	0.64	0.66	0.78
40	0.45	0.54	0.64	0.67	0.70	0.82
41	0.48	0.58	0.69	0.72	0.75	0.88
42	0.52	0.62	0.74	0.77	0.80	0.94
43	0.55	0.67	0.79	0.83	0.86	1.01
44	0.59	0.72	0.85	0.89	0.92	1.09
45	0.64	0.77	0.91	0.95	0.99	1.16
46	0.68	0.83	0.97	1.02	1.06	1.25
47	0.73	0.89	1.05	1.10	1.14	1.34
48	0.78	0.95	1.12	1.18	1.22	1.44
49	0.84	1.02	1.20	1.26	1.31	1.54
50	0.90	1.09	1.29	1.36	1.40	1.65
51	0.96	1.17	1.39	1.46	1.51	1.77
52	1.03	1.26	1.49	1.56	1.62	1.90
53	1.10	1.35	1.59	1.68	1.73	2.04
54	1.18	1.45	1.71	1.80	1.86	2.19
55	1.27	1.55	1.84	1.93	2.00	2.34
56	1.36	1.66	1.97	2.07	2.14	2.51
57	1.46	1.79	2.11	2.22	2.30	2.70
58	1.64	2.01	2.38	2.50	2.58	3.03
59	1.84	2.26	2.67	2.81	2.90	3.40
60	2.07	2.54	3.01	3.16	3.26	3.82
61	2.33	2.86	3.38	3.55	3.66	4.29
62	2.62	3.22	3.80	3.99	4.12	4.82
63	2.95	3.62	4.28	4.48	4.63	5.41
64	3.32	4.07	4.81	5.04	5.20	6.04
65	3.73	4.58	5.41	5.67	5.84	6.57
66	4.20	5.15	6.08	6.37	6.57	7.17
67	4.72	5.80	6.84	7.16	7.38	7.81
68	5.17	6.35	7.49	7.84	8.09	8.52
69	5.65	6.95	8.20	8.59	8.86	9.30
70	6.18	7.61	8.99	9.41	9.70	10.18
71	6.76	8.33	9.84	10.31	10.62	11.37
72	7.39	9.12	10.78	11.29	11.64	12.77
73	8.13	10.04	11.87	12.43	12.81	14.34
74	8.93	11.05	13.08	13.69	14.10	16.10
75	9.82	12.16	14.40	15.07	15.52	18.06
76	10.79	13.39	15.85	16.59	17.09	19.87
77	11.86	14.74	17.46	18.27	18.81	21.87
78	11.86	14.74	17.46	18.27	18.81	21.67
79	11.86	14.74	17.46	18.27	18.81	20.69
80	11.86	14.74	17.46	18.27	18.81	19.70
81	11.86	14.74	17.46	18.27	18.81	19.70
82	11.86	14.74	17.46	18.27	18.81	19.70
83	11.86	14.74	17.46	18.27	18.81	19.70
84	11.86	14.74	17.46	18.27	18.81	19.70

GPB-COV-0002 2016 Rate Increases (%) :

Issue Age	Benefit Period					
	2	3	5	6	7	10
18-29	14%	14%	14%	14%	14%	14%
30	14%	14%	14%	14%	14%	14%
31	14%	14%	14%	14%	14%	14%
32	14%	14%	14%	14%	14%	14%
33	14%	14%	14%	14%	14%	14%
34	14%	14%	14%	14%	14%	14%
35	14%	14%	14%	14%	14%	14%
36	14%	14%	14%	14%	14%	14%
37	14%	14%	14%	14%	14%	14%
38	14%	14%	14%	14%	14%	14%
39	14%	14%	14%	14%	14%	14%
40	14%	14%	14%	14%	14%	14%
41	14%	14%	14%	14%	14%	14%
42	14%	14%	14%	14%	14%	14%
43	14%	14%	14%	14%	14%	14%
44	14%	14%	14%	14%	14%	14%
45	14%	14%	14%	14%	14%	14%
46	14%	14%	14%	14%	14%	14%
47	14%	14%	14%	14%	14%	14%
48	14%	14%	14%	14%	14%	14%
49	14%	14%	14%	14%	14%	14%
50	14%	14%	14%	14%	14%	14%
51	14%	14%	14%	14%	14%	14%
52	14%	14%	14%	14%	14%	14%
53	14%	14%	14%	14%	14%	14%
54	14%	14%	14%	14%	14%	14%
55	14%	14%	14%	14%	14%	14%
56	14%	14%	14%	14%	14%	14%
57	14%	14%	14%	14%	14%	14%
58	14%	14%	14%	14%	14%	14%
59	14%	14%	14%	14%	14%	14%
60	14%	14%	14%	14%	14%	14%
61	14%	14%	14%	14%	14%	14%
62	14%	14%	14%	14%	14%	14%
63	14%	14%	14%	14%	14%	14%
64	14%	14%	14%	14%	14%	14%
65	14%	14%	14%	14%	14%	14%
66	14%	14%	14%	14%	14%	14%
67	14%	14%	14%	14%	14%	14%
68	14%	14%	14%	14%	14%	14%
69	14%	14%	14%	14%	14%	14%
70	14%	14%	14%	14%	14%	14%
71	14%	14%	14%	14%	14%	14%
72	14%	14%	14%	14%	14%	14%
73	14%	14%	14%	14%	14%	14%
74	14%	14%	14%	14%	14%	14%
75	14%	14%	14%	14%	14%	14%
76	14%	14%	14%	14%	14%	14%
77	14%	14%	14%	14%	14%	14%
78	14%	14%	14%	14%	14%	14%
79	14%	14%	14%	14%	14%	14%
80	14%	14%	14%	14%	14%	14%
81	14%	14%	14%	14%	14%	14%
82	14%	14%	14%	14%	14%	14%
83	14%	14%	14%	14%	14%	14%
84	14%	14%	14%	14%	14%	14%

Appendix A - Comparison to New Business Rates (GPB-COV-0002)  
Rates are shown for a 90-day EP, 60% HHC benefit, and are per \$5 (for a \$200 monthly benefit)

Inflation Option: ABI (5% Compound Inflation)

New Business Rates adjusted for Benefit Differences\* :

Issue Age	Benefit Period		
	3	5	6
18-29	8.24	9.39	12.41
30	8.24	9.39	12.41
31	8.24	9.39	12.41
32	8.24	9.39	12.41
33	8.24	9.39	12.41
34	8.25	9.39	12.41
35	8.29	9.39	12.49
36	8.33	9.45	12.60
37	8.53	9.52	12.74
38	8.57	9.63	12.85
39	8.62	9.71	13.00
40	8.67	9.80	13.12
41	8.83	10.07	13.56
42	9.01	10.30	14.01
43	9.15	10.57	14.44
44	9.48	10.98	14.95
45	9.66	11.27	15.44
46	9.88	11.60	16.03
47	10.08	11.95	16.40
48	10.32	12.30	17.02
49	10.57	12.67	17.67
50	10.82	13.08	18.34
51	11.12	13.29	18.82
52	11.44	13.68	19.10
53	11.76	13.94	19.58
54	12.07	14.36	19.89
55	12.41	14.61	20.43
56	12.64	14.89	20.84
57	13.01	15.14	21.31
58	13.29	15.41	21.80
59	13.52	15.53	22.05
60	13.79	15.82	22.53
61	14.11	16.21	22.76
62	14.63	16.44	22.85
63	15.04	16.92	22.99
64	15.35	17.21	23.13
65	15.81	17.60	23.31
66	16.71	18.54	24.63
67	17.48	19.61	25.93
68	18.36	20.78	27.42
69	19.28	21.95	28.88
70	20.34	23.21	30.57
71	21.78	24.48	32.00
72	23.38	25.75	33.75
73	24.98	27.16	35.30
74	26.80	28.74	37.11
75	28.83	30.25	38.93
76	30.87	32.13	41.59
77	32.85	34.19	44.51
78	35.11	36.34	47.73
79	37.54	38.62	51.03
80	40.16	41.08	54.59
81	44.14	45.19	60.05
82	47.72	48.89	64.99
83	53.32	54.63	72.55
84	58.40	59.87	79.47

GPB-COV-0002 Rates after Requested Rate Increases  
excluding additional rate increase due to cost of delay :

Issue Age	Benefit Period		
	3	5	6
18-29	2.48	2.91	3.47
30	2.48	2.91	3.47
31	2.48	2.91	3.47
32	2.48	2.91	3.47
33	2.52	2.96	3.53
34	2.56	3.01	3.59
35	2.60	3.06	3.65
36	2.65	3.12	3.71
37	2.69	3.17	3.77
38	2.73	3.22	3.84
39	2.78	3.28	3.90
40	2.82	3.33	3.97
41	2.95	3.48	4.15
42	3.08	3.64	4.33
43	3.21	3.80	4.52
44	3.36	3.97	4.73
45	3.51	4.15	4.94
46	3.66	4.33	5.16
47	3.83	4.52	5.39
48	4.00	4.73	5.63
49	4.17	4.94	5.88
50	4.36	5.16	6.14
51	4.55	5.39	6.41
52	4.76	5.63	6.70
53	4.97	5.88	7.00
54	5.19	6.14	7.31
55	5.42	6.42	7.63
56	5.66	6.71	7.97
57	5.92	7.00	8.33
58	6.38	7.55	8.97
59	6.87	8.13	9.66
60	7.41	8.77	10.41
61	7.99	9.45	11.21
62	8.61	10.18	12.08
63	9.28	10.74	12.74
64	9.82	11.20	13.29
65	10.24	11.68	13.85
66	10.71	12.22	14.50
67	11.20	12.78	15.17
68	11.71	13.36	15.87
69	12.25	13.97	16.61
70	12.81	14.62	17.38
71	13.85	15.80	18.83
72	14.97	17.08	20.39
73	16.19	18.47	22.09
74	17.50	19.97	23.93
75	18.92	21.59	25.92
76	20.27	23.34	28.07
77	20.68	24.50	29.02
78	19.78	23.43	27.76
79	18.88	22.37	26.50
80	17.98	21.30	25.24
81	17.98	21.30	25.24
82	17.98	21.30	25.24
83	17.98	21.30	25.24
84	17.98	21.30	25.24

GPB-COV-0002 Rates after Requested Rate Increases  
including additional rate increase due to cost of delay :

Issue Age	Benefit Period		
	3	5	6
18-29	2.48	2.91	3.47
30	2.48	2.91	3.47
31	2.48	2.91	3.47
32	2.48	2.91	3.47
33	2.52	2.96	3.53
34	2.56	3.01	3.59
35	2.60	3.06	3.65
36	2.65	3.12	3.71
37	2.69	3.17	3.77
38	2.73	3.22	3.84
39	2.78	3.28	3.90
40	2.82	3.33	3.97
41	2.95	3.48	4.15
42	3.08	3.64	4.33
43	3.21	3.80	4.52
44	3.36	3.97	4.73
45	3.51	4.15	4.94
46	3.66	4.33	5.16
47	3.83	4.52	5.39
48	4.00	4.73	5.63
49	4.17	4.94	5.88
50	4.36	5.16	6.14
51	4.55	5.39	6.41
52	4.76	5.63	6.70
53	4.97	5.88	7.00
54	5.19	6.14	7.31
55	5.42	6.42	7.63
56	5.66	6.71	7.97
57	5.92	7.00	8.33
58	6.38	7.55	8.97
59	6.87	8.13	9.66
60	7.41	8.77	10.41
61	7.99	9.45	11.21
62	8.61	10.18	12.08
63	9.28	10.74	12.74
64	9.82	11.20	13.29
65	10.24	11.68	13.85
66	10.71	12.22	14.50
67	11.20	12.78	15.17
68	11.71	13.36	15.87
69	12.25	13.97	16.61
70	12.81	14.62	17.38
71	13.85	15.80	18.83
72	14.97	17.08	20.39
73	16.19	18.47	22.09
74	17.50	19.97	23.93
75	18.92	21.59	25.92
76	20.27	23.34	28.07
77	20.68	24.50	29.02
78	19.78	23.43	27.76
79	18.88	22.37	26.50
80	17.98	21.30	25.24
81	17.98	21.30	25.24
82	17.98	21.30	25.24
83	17.98	21.30	25.24
84	17.98	21.30	25.24

GPB-COV-0002 2016 Rate Increases (%) :

Issue Age	Benefit Period		
	3	5	6
18-29	14%	14%	14%
30	14%	14%	14%
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79	14%	14%	14%
80	14%	14%	14%
81	14%	14%	14%
82	14%	14%	14%
83	14%	14%	14%
84	14%	14%	14%

\* Benefit Differences between GPB-COV-0002 and P-FACE (2009):

- The P-FACE (2009) ABI option increases the benefits and remaining LMB by 5% per year compounded. The GPB-COV-0002 ABI option increases the DMB by 5% per year; the new LMB is calculated as the DMB times the Max Benefit Factor.
- The 6 yr Benefit Period is shown with a 75% HHC, since no 60% HHC was sold for this Benefit Period
- Other benefit differences that were adjusted for include: Homemaker benefit, Informal Care, ROB, and Stay-at-Home benefits
- P-FACE 2009 Group rates are approximated by applying the ratio of [ICC12-LTC-12 / LTC-03] Retail rates to P-FACE 2009 rates (P-FACE 2009 was the last Group LTC product offered, but would increase by a comparable amount relative to Retail LTC products).
- ICC12-LTC-12 10yr and Lifetime rates are approximated by applying the ratio of [LTC-03 Lifetime (or 10yr) / LTC-03 6yr] to the ICC12-LTC-12 6yr rates (LTC-03 was the last product in which we offered 10yr or Lifetime benefit period options).
- An additional 3% factor was applied to account reflect differences in EP: LTC-03 has an EP where 1 day of HHC = 7 days towards EP, and ICC12-LTC-12 is a true service-day EP
- ICC12-LTC-12 unisex rates are determined by assuming a 60% female / 40% male mix of business.
- P-FACE 2009 rates were increased by an additional 9.5%, accounting for the average increase to premium rates for ICC12-LTC-12 if they were still being sold in 2016.



**Appendix B1**  
**John Hancock Life Insurance Company (U.S.A.)**  
**GPB-COV-0002**

*Premiums to be used only with those  
that have not previously elected an inflation decrease option*

**Monthly \$40 Base Rates**  
**50% Home Health Care Benefit**

BP ► Age ▼	FPO Base						ABI Option: 5% Compound Inflation		
	2 Years	3 Years	5 Years	6 Years	7 Years	10 Years	3 Years	5 Years	6 Years
18-29	3.80	4.26	4.74	4.91	5.05	5.89	20.97	23.34	24.19
30	3.80	4.26	4.74	4.91	5.05	5.89	20.97	23.34	24.19
31	3.80	4.26	4.74	4.91	5.05	5.89	20.97	23.34	24.19
32	3.80	4.26	4.74	4.91	5.05	5.89	20.97	23.34	24.19
33	3.91	4.39	4.90	5.09	5.22	6.10	21.25	23.71	24.59
34	4.02	4.53	5.07	5.26	5.41	6.32	21.54	24.08	25.00
35	4.14	4.68	5.24	5.44	5.59	6.55	21.83	24.47	25.41
36	4.26	4.82	5.42	5.63	5.79	6.78	22.13	24.86	25.83
37	4.38	4.98	5.60	5.83	5.99	7.02	22.42	25.25	26.26
38	4.50	5.13	5.79	6.03	6.20	7.27	22.73	25.65	26.69
39	4.63	5.29	5.99	6.24	6.42	7.53	23.03	26.06	27.13
40	4.77	5.46	6.19	6.45	6.65	7.80	23.34	26.47	27.58
41	5.04	5.80	6.58	6.86	7.07	8.29	24.32	27.62	28.79
42	5.34	6.15	7.00	7.29	7.51	8.82	25.33	28.82	30.04
43	5.65	6.53	7.44	7.76	7.99	9.37	26.38	30.06	31.35
44	5.98	6.92	7.90	8.25	8.50	9.97	27.48	31.36	32.72
45	6.33	7.35	8.40	8.77	9.03	10.60	28.62	32.72	34.15
46	6.70	7.80	8.93	9.32	9.61	11.26	29.81	34.14	35.63
47	7.09	8.27	9.49	9.91	10.21	11.98	31.05	35.62	37.19
48	7.50	8.78	10.09	10.54	10.86	12.73	32.34	37.16	38.81
49	7.94	9.32	10.72	11.20	11.55	13.54	33.69	38.77	40.50
50	8.40	9.89	11.39	11.91	12.28	14.39	35.09	40.44	42.27
51	8.89	10.49	12.11	12.66	13.06	15.30	36.55	42.19	44.11
52	9.41	11.13	12.87	13.46	13.88	16.27	38.07	44.02	46.04
53	9.96	11.81	13.68	14.31	14.76	17.30	39.65	45.93	48.04
54	10.54	12.53	14.54	15.22	15.69	18.39	41.30	47.91	50.14
55	11.15	13.30	15.45	16.18	16.69	19.55	43.01	49.99	52.32
56	11.80	14.11	16.43	17.20	17.74	20.79	44.80	52.15	54.61
57	12.49	14.97	17.46	18.28	18.87	22.10	46.67	54.41	56.99
58	14.05	16.85	19.64	20.57	21.21	24.84	50.34	58.68	61.44
59	15.81	18.96	22.10	23.13	23.85	27.91	54.31	63.28	66.24
60	17.79	21.34	24.86	26.01	26.82	31.36	58.60	68.25	71.42
61	20.02	24.02	27.97	29.26	30.16	35.24	63.22	73.60	77.00
62	22.52	27.03	31.46	32.91	33.91	39.60	68.20	79.38	83.02
63	25.34	30.42	35.40	37.01	38.13	44.49	73.58	83.86	87.68
64	28.52	34.24	39.82	41.62	42.87	49.70	77.86	87.50	91.51
65	32.08	38.53	44.80	46.81	48.20	54.11	81.23	91.30	95.51
66	36.10	43.36	50.40	52.65	54.19	59.03	85.03	95.56	100.04
67	40.62	48.80	56.71	59.22	60.94	64.40	89.00	100.03	104.79
68	44.15	53.15	61.84	64.59	66.46	69.93	92.96	104.56	109.62
69	47.98	57.90	67.44	70.44	72.49	76.00	97.09	109.30	114.66
70	52.15	63.06	73.55	76.83	79.06	82.87	101.41	114.25	119.94
71	56.68	68.69	80.21	83.79	86.23	92.21	109.49	123.45	129.85
72	61.61	74.81	87.47	91.39	94.05	103.12	118.22	133.39	140.59
73	67.40	82.02	95.99	100.30	103.21	115.44	127.64	144.11	152.14
74	73.74	89.93	105.35	110.07	113.27	129.23	137.82	155.69	164.64
75	80.68	98.59	115.61	120.80	124.30	144.45	148.81	168.21	178.17
76	88.26	108.09	126.88	132.57	136.41	158.48	159.22	181.72	192.81
77	96.57	118.51	139.24	145.50	149.70	173.86	162.22	190.60	199.16
78	105.79	129.83	152.54	159.39	164.00	188.75	169.99	199.72	208.69
79	115.89	142.22	167.10	174.61	179.65	197.38	177.75	208.85	218.23
80	126.95	155.80	183.06	191.28	196.81	205.93	185.45	217.90	227.68
81	139.08	170.68	200.54	209.55	215.60	225.59	203.16	238.70	249.42
82	152.36	186.98	219.69	229.55	236.19	247.13	222.56	261.50	273.24
83	166.90	204.83	240.67	251.47	258.74	270.73	243.81	286.47	299.33
84	182.84	224.39	263.65	275.49	283.45	296.58	267.09	313.82	327.91
85	200.30	245.82	288.82	301.79	310.51	324.90	292.60	343.79	359.22

**Appendix B1**  
**John Hancock Life Insurance Company (U.S.A.)**  
**GPB-COV-0002**

*Premiums to be used only with those  
that have not previously elected an inflation decrease option*

**Monthly Rates per \$5 Increments**  
**50% Home Health Care Benefit**

BP ► Age ▼	FPO Base						ABI Option: 5% Compound Inflation		
	2 Years	3 Years	5 Years	6 Years	7 Years	10 Years	3 Years	5 Years	6 Years
18-29	0.25	0.25	0.36	0.38	0.40	0.47	2.21	2.63	2.77
30	0.25	0.25	0.36	0.38	0.40	0.47	2.21	2.63	2.77
31	0.25	0.25	0.36	0.38	0.40	0.47	2.21	2.63	2.77
32	0.25	0.25	0.36	0.38	0.40	0.47	2.21	2.63	2.77
33	0.26	0.26	0.38	0.40	0.42	0.49	2.25	2.68	2.82
34	0.28	0.28	0.40	0.42	0.44	0.52	2.29	2.73	2.87
35	0.29	0.29	0.42	0.45	0.46	0.55	2.33	2.77	2.92
36	0.31	0.31	0.45	0.47	0.49	0.58	2.37	2.82	2.97
37	0.32	0.32	0.47	0.49	0.51	0.61	2.41	2.87	3.03
38	0.34	0.34	0.49	0.52	0.54	0.64	2.45	2.93	3.08
39	0.36	0.36	0.52	0.55	0.57	0.67	2.49	2.98	3.14
40	0.37	0.37	0.55	0.58	0.60	0.71	2.54	3.03	3.19
41	0.40	0.40	0.59	0.62	0.64	0.76	2.65	3.17	3.34
42	0.43	0.43	0.63	0.67	0.69	0.82	2.78	3.31	3.49
43	0.47	0.47	0.68	0.72	0.75	0.88	2.90	3.47	3.65
44	0.50	0.50	0.74	0.78	0.80	0.95	3.04	3.62	3.82
45	0.54	0.54	0.79	0.83	0.86	1.02	3.18	3.79	3.99
46	0.58	0.58	0.85	0.90	0.93	1.10	3.32	3.96	4.17
47	0.63	0.63	0.92	0.97	1.00	1.18	3.48	4.14	4.36
48	0.67	0.67	0.99	1.04	1.08	1.27	3.63	4.33	4.56
49	0.73	0.73	1.06	1.12	1.16	1.37	3.80	4.53	4.77
50	0.78	0.78	1.15	1.21	1.25	1.47	3.98	4.74	4.99
51	0.84	0.84	1.23	1.30	1.34	1.58	4.16	4.95	5.21
52	0.91	0.91	1.33	1.40	1.45	1.70	4.35	5.18	5.45
53	0.98	0.98	1.43	1.51	1.56	1.83	4.55	5.41	5.70
54	1.05	1.05	1.54	1.62	1.68	1.97	4.76	5.66	5.96
55	1.13	1.13	1.66	1.74	1.80	2.12	4.98	5.92	6.23
56	1.22	1.22	1.78	1.88	1.94	2.28	5.20	6.19	6.51
57	1.31	1.31	1.92	2.02	2.09	2.46	5.44	6.47	6.81
58	1.48	1.48	2.16	2.27	2.35	2.76	5.87	6.98	7.34
59	1.66	1.66	2.43	2.56	2.64	3.10	6.33	7.52	7.91
60	1.87	1.87	2.74	2.88	2.97	3.48	6.83	8.11	8.52
61	2.10	2.10	3.08	3.24	3.34	3.92	7.37	8.75	9.19
62	2.37	2.37	3.47	3.64	3.76	4.40	7.95	9.43	9.90
63	2.66	2.66	3.90	4.09	4.23	4.94	8.57	9.96	10.45
64	3.00	3.00	4.39	4.60	4.75	5.52	9.07	10.39	10.91
65	3.37	3.37	4.94	5.18	5.35	6.01	9.46	10.84	11.38
66	3.80	3.80	5.56	5.83	6.01	6.56	9.90	11.34	11.92
67	4.27	4.27	6.25	6.55	6.76	7.16	10.36	11.87	12.48
68	4.68	4.68	6.86	7.19	7.41	7.82	10.84	12.42	13.07
69	5.14	5.14	7.53	7.89	8.13	8.54	11.35	13.00	13.68
70	5.63	5.63	8.26	8.66	8.92	9.37	11.88	13.60	14.32
71	6.17	6.17	9.06	9.50	9.79	10.49	12.85	14.71	15.52
72	6.77	6.77	9.95	10.42	10.74	11.79	13.91	15.92	16.82
73	7.45	7.45	10.97	11.49	11.84	13.26	15.05	17.22	18.22
74	8.20	8.20	12.09	12.66	13.05	14.90	16.28	18.62	19.74
75	9.03	9.03	13.33	13.96	14.38	16.73	17.61	20.14	21.38
76	9.94	9.94	14.69	15.38	15.85	18.43	18.88	21.78	23.16
77	10.95	10.95	16.20	16.96	17.47	20.30	19.27	22.87	23.95
78	12.02	12.02	17.78	18.62	19.18	22.09	20.24	24.02	25.15
79	13.20	13.20	19.52	20.44	21.06	23.15	21.21	25.18	26.36
80	14.49	14.49	21.44	22.45	23.12	24.21	22.18	26.33	27.57
81	15.91	15.91	23.54	24.64	25.38	26.58	24.35	28.91	30.27
82	17.47	17.47	25.85	27.06	27.87	29.19	26.74	31.74	33.24
83	19.18	19.18	28.38	29.71	30.60	32.05	29.36	34.85	36.49
84	21.06	21.06	31.16	32.62	33.60	35.19	32.23	38.27	40.07
85	23.12	23.12	34.21	35.82	36.89	38.64	35.39	42.02	43.99

**John Hancock Life Insurance Company (U.S.A.)**  
**Actuarial Memorandum for Inforce Rate Increase – Care Choice Policy Series**  
**January 6, 2017**

<u>Product Name</u>	<u>Form Number</u>	<u>Issue Date Range</u>
Care Choice	P-GLTC(2002-2) PA	April 2004 - January 2010

**These policy form rates were originally priced with a margin for moderately adverse experience in accordance with the NAIC model rate stability regulations which were being implemented on a State by State basis during the time of our initial rate filing.**

## **1. Scope & Purpose**

This memorandum consists of materials which support the development of new premium rates for the above captioned Policy series forms. The purpose of this memorandum is to demonstrate that the requirements of this State in regards to an in force rate increase request have been met. This rate filing is not intended to be used for any other purpose.

## **2. Benefit Description**

A brief policy description for the certificate form:

### P-GLTC(2002-2) PA

This is a Group Long-Term Care plan that pays benefits to the certificate holder insured for the following covered care or services provided to the insured:

- Confinement in a Nursing Home or Alternate Care Facility for room, board and care services;
- Home Health Care; Hospice Care, Respite Care; or
- Attendance at an Adult Day Care Center providing Adult Day Care.

It is intended to be a Qualified Long-Term Care Insurance contract under the Federal Internal Revenue Code.

The benefit trigger is determined based on the insured's cognitive impairment or his requiring substantial assistance to perform two out of six activities of daily living (ADLs) of bathing, dressing, eating, toileting, transferring and maintaining continence. The insured must be certified to be chronically ill by a licensed health care practitioner.

Long-Term Care Benefits are paid at 100% of the actual charges for each day of care after the qualification period up to:

### Nursing Home (NH):

- (a) the Nursing Home Daily Maximum Benefit (NH DMB) elected for care received in a NH, or

### Community Based Professional Care (CBPC):

- (b) the CBPC DMB elected for covered services received in a community setting (including home health care, adult day care and hospice care provided outside a NH, hospice facility or alternate care facility) or

**John Hancock Life Insurance Company (U.S.A.)**  
**Actuarial Memorandum for Inforce Rate Increase – Care Choice Policy Series**  
**January 6, 2017**

Alternate Care Facility (ACF):

- (c) the ACF DMB elected for covered services received in an ACF, or

Informal Care:

- (d) the Informal Care DMB elected up to the number of days per calendar year elected for covered Informal Care services (custodial or homemaker services provided by a person without professional skills).

Benefits are payable until the Lifetime Maximum Benefit (LMB) is reached. Benefits are coordinated with Medicare as well as with any other Group certificate coverages.

### 3. Renewability

Certificates under this policy form have a guaranteed renewable clause.

### 4. Applicability

This filing is applicable to inforce policies and to new certificates enrolling in this policy series. The premium changes will apply to the base forms as well as all applicable optional benefits upon the expiration of any applicable group policy rate guarantees.

### 5. Actuarial Assumptions

Morbidity

The morbidity assumptions are derived from our own experience, following a comprehensive claim study recently completed. The study has been peer reviewed both internally as well as by an Independent third party.

Our claims projections include 12 years of future morbidity improvements at 1.1% per year, as well as a 5.0% margin for moderately adverse experience, consistent with the margin originally anticipated in our original pricing loss ratio.

Below are currently expected sample annual claim costs for a P-GLTC(2002-2) PA policy, \$10 daily benefit, and 5yr LMB which include a 5.0% margin for moderately adverse experience:

Issue Age 45		
Age	FPO	ABI
45	4.80	6.91
50	4.84	8.64
55	6.66	14.54
60	7.44	17.88
65	12.79	38.11
70	23.74	86.37
75	64.47	296.44
80	161.02	934.19
85	343.64	2,465.49

Issue Age 50		
Age	FPO	ABI
50	5.98	8.53
55	7.54	13.27
60	8.92	17.54
65	17.17	41.58
70	36.57	107.76
75	98.24	364.56
80	235.22	1,099.07
85	431.34	2,493.52

Issue Age 60		
Age	FPO	ABI
60	8.19	10.63
65	16.48	26.36
70	39.07	74.56
75	108.64	256.23
80	266.18	782.32
85	485.14	1,751.73

**John Hancock Life Insurance Company (U.S.A.)**  
**Actuarial Memorandum for Inforce Rate Increase – Care Choice Policy Series**  
**January 6, 2017**

Voluntary Lapses

The voluntary lapse rates are also based on our own experience:

In addition to the lapse rates shown below, we assume an additional 3.3% lapse rate due to the rate increase.

**Guaranteed Issue:**

Duration	Issue Age								
	30	40	45	50	55	60	65	70	80
1	18.7%	10.8%	8.8%	7.4%	6.8%	7.0%	7.0%	7.0%	7.0%
2	16.0%	9.4%	7.4%	5.9%	5.4%	5.4%	5.4%	5.4%	5.4%
3	12.4%	7.0%	6.5%	4.9%	4.0%	3.8%	3.8%	3.8%	3.8%
4	10.5%	6.3%	5.7%	4.3%	3.4%	3.0%	3.0%	3.0%	3.0%
5	8.9%	5.6%	5.0%	3.8%	3.0%	2.4%	2.4%	2.4%	2.4%
6	7.5%	5.0%	4.4%	3.3%	2.6%	1.9%	1.9%	1.9%	1.9%
7	6.3%	4.4%	3.8%	2.9%	2.2%	1.5%	1.5%	1.5%	1.5%
8	5.3%	3.9%	3.3%	2.5%	1.9%	1.2%	1.2%	1.2%	1.2%
9	4.8%	3.6%	3.0%	2.3%	1.7%	1.0%	1.0%	1.0%	1.0%
10	4.7%	3.3%	2.7%	2.1%	1.5%	0.8%	0.8%	0.8%	0.8%
11	4.3%	3.0%	2.4%	1.9%	1.4%	0.6%	0.6%	0.6%	0.6%
12	3.7%	2.7%	2.1%	1.6%	1.2%	0.5%	0.5%	0.5%	0.5%
13	3.3%	2.4%	1.8%	1.4%	1.0%	0.5%	0.5%	0.5%	0.5%
14	3.0%	2.2%	1.6%	1.3%	0.9%	0.5%	0.5%	0.5%	0.5%
15	2.7%	1.9%	1.4%	1.1%	0.8%	0.5%	0.5%	0.5%	0.5%
16	2.4%	1.7%	1.2%	1.0%	0.7%	0.5%	0.5%	0.5%	0.5%
17	2.2%	1.5%	1.1%	0.9%	0.6%	0.5%	0.5%	0.5%	0.5%
18	2.0%	1.4%	0.9%	0.8%	0.5%	0.5%	0.5%	0.5%	0.5%
19	1.8%	1.2%	0.8%	0.7%	0.5%	0.5%	0.5%	0.5%	0.5%
20	1.6%	1.1%	0.8%	0.7%	0.5%	0.5%	0.5%	0.5%	0.5%
21	1.4%	1.0%	0.8%	0.7%	0.5%	0.5%	0.5%	0.5%	0.5%
22	1.3%	1.0%	0.8%	0.7%	0.5%	0.5%	0.5%	0.5%	0.5%
23	1.2%	1.0%	0.8%	0.7%	0.5%	0.5%	0.5%	0.5%	0.5%
24	1.0%	1.0%	0.8%	0.7%	0.5%	0.5%	0.5%	0.5%	0.5%
25+	1.0%	1.0%	0.8%	0.7%	0.5%	0.5%	0.5%	0.5%	0.5%

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**Fully Underwritten:**

Duration	Issue Age								
	30	40	45	50	55	60	65	70	80
1	10.3%	5.8%	4.7%	3.4%	2.9%	3.0%	3.7%	3.0%	3.0%
2	8.4%	4.8%	4.0%	2.9%	2.4%	2.1%	2.4%	1.8%	1.8%
3	7.2%	4.6%	3.4%	2.8%	2.0%	1.7%	1.4%	1.4%	1.4%
4	6.2%	4.0%	2.9%	2.3%	1.7%	1.3%	1.1%	1.1%	1.1%
5	5.4%	3.5%	2.5%	2.0%	1.4%	1.1%	0.9%	1.0%	1.0%
6	4.6%	3.0%	2.2%	1.7%	1.2%	0.8%	0.7%	0.8%	0.8%
7	4.0%	2.6%	1.9%	1.4%	1.0%	0.7%	0.4%	0.7%	0.7%
8	3.4%	2.3%	1.6%	1.2%	0.9%	0.5%	0.4%	0.5%	0.5%
9	2.9%	2.0%	1.4%	1.0%	0.7%	0.4%	0.4%	0.5%	0.5%
10	2.7%	1.7%	1.3%	0.8%	0.6%	0.4%	0.4%	0.5%	0.5%
11	2.4%	1.5%	1.1%	0.8%	0.6%	0.4%	0.4%	0.5%	0.5%
12	2.3%	1.3%	0.8%	0.6%	0.5%	0.4%	0.4%	0.5%	0.5%
13	2.1%	1.2%	0.7%	0.6%	0.4%	0.4%	0.4%	0.5%	0.5%
14	2.0%	1.0%	0.6%	0.5%	0.4%	0.4%	0.4%	0.5%	0.5%
15	1.8%	0.9%	0.5%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
16	1.7%	0.8%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
17	1.6%	0.7%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
18	1.4%	0.7%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
19	1.3%	0.6%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
20	1.2%	0.6%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
21	1.1%	0.6%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
22	1.1%	0.6%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
23	1.0%	0.6%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
24	0.9%	0.6%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
25+	0.6%	0.6%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%

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**Mortality**

The mortality rates have also been derived based on our own experience within our retail and group long-term care block of business.

The base mortality table is the unloaded 1994 Group Annuity Mortality Table, sex-distinct, with 19 years of historical improvements based on scale AA. We then apply the following series of adjustment factors which vary by underwriting class and gender:

**Fully Underwritten:**

<b>Policy Duration</b>	<b>Issue Age</b>			
	<b>&lt; = 55</b>	<b>65</b>	<b>75</b>	<b>&gt; = 82</b>
1	33.3%	19.0%	19.0%	28.5%
2	36.1%	21.9%	25.7%	33.3%
3	39.0%	24.7%	32.3%	38.0%
4	40.9%	27.6%	39.0%	42.8%
5	42.8%	31.4%	45.6%	47.5%
6	44.7%	36.1%	52.3%	52.3%
7	46.6%	41.8%	55.1%	57.0%
8	48.5%	48.5%	58.0%	61.8%
9	50.4%	55.1%	60.8%	66.5%
10	51.3%	61.8%	63.7%	71.3%
11	52.3%	64.6%	69.4%	76.0%
12	53.6%	66.5%	75.1%	80.8%
13	54.9%	67.5%	77.9%	85.5%
14	56.2%	68.5%	80.8%	90.3%
15	57.4%	69.7%	83.6%	95.0%
16	58.7%	71.1%	85.5%	95.0%
17	60.0%	72.5%	86.9%	95.0%
18	61.3%	74.0%	88.5%	95.0%
19	62.6%	75.4%	90.1%	95.0%
20	63.9%	76.9%	92.2%	95.0%
21	65.6%	78.4%	95.0%	95.0%
22	67.5%	80.1%	95.0%	95.0%
23	69.4%	81.7%	95.0%	95.0%
24	72.2%	83.4%	95.0%	95.0%
25	76.0%	85.1%	95.0%	95.0%
26	79.8%	86.7%	95.0%	95.0%
27	83.6%	88.4%	95.0%	95.0%
28	87.4%	90.0%	95.0%	95.0%
29	91.2%	91.7%	95.0%	95.0%
30+	95.0%	95.0%	95.0%	95.0%

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**Guaranteed Issue Male:**

<b>Policy Duration</b>	<b>Issue Age</b>				
	<b>&lt; = 45</b>	<b>55</b>	<b>65</b>	<b>75</b>	<b>&gt; = 84</b>
1	133.0%	76.0%	52.3%	65.6%	95.0%
2	129.2%	75.1%	53.2%	67.5%	95.0%
3	125.4%	74.1%	54.2%	70.3%	95.0%
4	121.6%	73.2%	55.1%	73.2%	95.0%
5	117.8%	72.2%	57.0%	76.0%	95.0%
6	115.0%	70.3%	58.9%	79.8%	95.0%
7	112.1%	68.4%	60.8%	83.6%	95.0%
8	109.3%	64.6%	61.8%	87.4%	95.0%
9	106.4%	60.8%	62.7%	91.2%	95.0%
10	103.6%	57.0%	63.7%	95.0%	95.0%
11	100.7%	53.2%	65.6%	95.0%	95.0%
12	98.8%	54.2%	67.5%	95.0%	95.0%
13	96.9%	55.1%	70.3%	95.0%	95.0%
14	95.0%	57.0%	73.2%	95.0%	95.0%
15	91.2%	58.0%	76.0%	95.0%	95.0%
16	88.8%	59.5%	80.6%	96.0%	96.0%
17	86.8%	62.1%	85.4%	97.0%	97.0%
18	85.2%	63.7%	90.2%	98.0%	98.0%
19	83.9%	65.3%	95.0%	99.0%	99.0%
20	82.8%	67.0%	100.0%	100.0%	100.0%
21	81.3%	69.0%	100.0%	100.0%	100.0%
22	80.0%	71.0%	100.0%	100.0%	100.0%
23	79.1%	74.0%	100.0%	100.0%	100.0%
24	78.6%	77.0%	100.0%	100.0%	100.0%
25	84.0%	80.0%	100.0%	100.0%	100.0%
26	88.0%	84.0%	100.0%	100.0%	100.0%
27	92.0%	88.0%	100.0%	100.0%	100.0%
28	96.0%	92.0%	100.0%	100.0%	100.0%
29	98.0%	96.0%	100.0%	100.0%	100.0%
30+	100.0%	100.0%	100.0%	100.0%	100.0%



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**Guaranteed Issue Female:**

Policy Duration	Issue Age				
	< = 45	55	65	75	> = 84
1	154.0%	88.0%	60.5%	75.9%	110.0%
2	149.6%	86.9%	61.6%	78.1%	110.0%
3	145.2%	85.8%	62.7%	81.4%	110.0%
4	140.8%	84.7%	63.8%	84.7%	110.0%
5	136.4%	83.6%	66.0%	88.0%	110.0%
6	133.1%	81.4%	68.2%	92.4%	110.0%
7	129.8%	79.2%	70.4%	96.8%	110.0%
8	126.5%	74.8%	71.5%	101.2%	110.0%
9	123.2%	70.4%	72.6%	105.6%	110.0%
10	119.9%	66.0%	73.7%	110.0%	110.0%
11	116.6%	61.6%	75.9%	110.0%	110.0%
12	114.4%	62.7%	78.1%	110.0%	110.0%
13	112.2%	63.8%	81.4%	110.0%	110.0%
14	110.0%	66.0%	84.7%	110.0%	110.0%
15	105.6%	67.1%	88.0%	110.0%	110.0%
16	99.9%	67.0%	90.7%	108.0%	108.0%
17	94.8%	67.8%	93.3%	106.0%	106.0%
18	90.4%	67.6%	95.7%	104.0%	104.0%
19	86.4%	67.3%	97.9%	102.0%	102.0%
20	82.8%	67.0%	100.0%	100.0%	100.0%
21	81.3%	69.0%	100.0%	100.0%	100.0%
22	80.0%	71.0%	100.0%	100.0%	100.0%
23	79.1%	74.0%	100.0%	100.0%	100.0%
24	78.6%	77.0%	100.0%	100.0%	100.0%
25	84.0%	80.0%	100.0%	100.0%	100.0%
26	88.0%	84.0%	100.0%	100.0%	100.0%
27	92.0%	88.0%	100.0%	100.0%	100.0%
28	96.0%	92.0%	100.0%	100.0%	100.0%
29	98.0%	96.0%	100.0%	100.0%	100.0%
30+	100.0%	100.0%	100.0%	100.0%	100.0%

Factors for ages not listed above are interpolated.

We are also projecting 12 years of future mortality improvement based on scale AA, consistent with the 12 years of future morbidity improvement in our future claim projections.

Expenses

Expenses have not been explicitly projected. It is assumed that the originally filed expense assumptions remain appropriate.

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**6. Trend Assumptions**

As this is not medical insurance, we have not included any explicit medical cost trends in the projections.

**7. Marketing Method**

The employees and other eligibles were marketed through the Employer, Union or Association as part of their corporate sponsored employee benefits package with the support of John Hancock representatives and direct mail.

**8. Underwriting**

Actively at Work employees were generally offered coverage on a Guaranteed Acceptance basis during limited enrollment periods. Other eligibles were underwritten using either simplified (short form) or full underwriting.

**9. Premium Classes**

The base policy premium rates vary by Issue age, LMB, and Inflation Option, as in the initial rate filing.

All premium factors related to the insured elected benefit design options, case size, commissions, or underwriting risk class remain unchanged from the initial rate filing, with the following exception: There was a 20% load on post-issue date optional coverage increases to the insured's DMB. Our current new business rates do not include this load on post-issue date option coverage. To maintain consistency with our current new business pricing, both the past and future optional coverage increases will no longer be loaded by 20%.

**10. Premium Modalization Rules**

Premiums are payable through payroll deduction, direct bill or automatic bank withdrawal.

The following factors are applied to the monthly premium for different billing frequencies.

<b>Frequency</b>	<b>Multiple of Monthly Premium</b>
Every 4 weeks	12 / 13
Semi-Monthly	12 / 24
Bi-weekly	12 / 26
First 4 weeks of month	12 / 48
Weekly	12 / 52

**11. Issue Age Range**

The issue age range is 18+ for all policy forms.

**12. Area Factors**

Area factors are not applicable to any of the policy forms or optional benefits.

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### 13. Average Annual Premium

The table below summarizes the average annual premium per certificate before and after the requested increase.

	<b>Nationwide</b>	<b>Pennsylvania</b>	
<b>Form</b>	before the rate increase	before the rate increase	after the rate increase
P-GLTC(2002-2) PA	1,230	1,550	1,795

### 14. Number of Certificate Holders

The table below summarizes, as of 12/31/2015, the number of certificates inforce and their 2015 annualized premium that will be affected by this rate increase in your state.

<b>Form</b>	<b>Number of Certificates</b>	<b>2015 Annualized Premium</b>
P-GLTC(2002-2) PA	4,305	6,668,427

### 15. Reserves

Active Life Reserves have not been used in this rate increase demonstration. Minimum Statutory Claim reserves as of 12/31/2015 have been discounted to the date of incurral of each respective claim and included in the historical incurred claims. Incurred But Not Reported claim reserves as of 12/31/2015 have also been allocated to the calendar year of incurral and included in historic incurred claims.

### 16. Requested Rate Increase

The Company is requesting an average rate increase of 15.8%. Rate increases were derived as follows:

1. The Company first determined the projected lifetime loss ratio for this form based on nationwide actual experience and projected future experience assuming all prior rate increase requests were approved in full and within three months of the original filing date. We then determined the amount of rate increase (15.8%) that would be needed in order to revert to the lifetime loss ratio certified to in our 2010 inforce rate increase filing for this form.
2. We are no longer selling new business under this policy form, but we ensured that the proposed rate increases did not result in premium rates that exceed what could be reasonably estimated as new business rates for our Group forms. We determined such rates by applying a series of factors to the P-FACE(2009) policy form premium rates (which were the last set of Group LTC premium rates that were sold). One factor applied to P-FACE(2009) premium rates was a ratio of the most recent Traditional Retail premium rates filed in the Interstate Compact prior to Performance LTC (ICC12-LTC-12, filed in 2014) relative to the Retail LTC rates filed in 2010 (LTC-03). This was done because we believe that if new business for Group Long-Term Care was still being sold, premium rates would have increased by a comparable amount to our Retail business since 2010. Rates were increased by an additional 9.5% across the board, accounting for the average increase to premium rates for ICC12-LTC-12 if they were still being sold in 2016 since a 2016 experience study showed a need to raise rates by 9.5%. There is no impact to our proposed rate increase since our proposed premium rates fall below our assumed new business rates. These rates were then further adjusted for benefit differences and changes in underwriting guidelines and risk classification (this is demonstrated in **Appendix A**). After the application of this restriction the average rate increase for the forms listed in this memo is 15.8%.

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3. We ensured that the resulting overall increase in rates satisfied the rate stability rule ensuring no less than an 85% loss ratio on the rate increase portion, while applying the original loss ratio on the original rate schedule (as the original loss ratio was higher than 58%). This is demonstrated at the bottom of **Exhibit 1** where it can be seen that the sum of past and future projected incurred claims is not less than the sum of the original premium times the original loss ratio and the rate increase premium times the 85% loss ratio requirement.

**Appendix B1** contains the new proposed rate tables for all policy forms included with this filing for those certificate holders that *did not* elect an inflation reduction option as part of the 2010 rate increase filings.

**Appendix B2** contains the new proposed rate tables for all policy forms included with this filing for those certificate holders that *did* elect an inflation reduction option as part of the 2010 rate increase filings. Please note that the actual rates implemented may vary slightly from those in Appendices B1 and B2 due to implementation rounding algorithms.

Some of our older group clients have certificates inforce under different policy forms, having opted for upgrading their pre-existing employee benefit plan to a new plan covered under a newer policy form. In those situations, we have offered internal replacement (plan upgrade) opportunities to existing certificate holders, whereby a certificate holder may have elected to lapse their original coverage and purchase the new plan coverage as a replacement. In those situations, the insured would be subject to the attained age (at the time of the replacement) premium rates for their new coverage but in some situations we would provide a premium credit to recognize the premium they had paid since their issue age for their original coverage under the prior plan. For these insureds, we will determine their new premium rate based on their historical original issue ages respectively for each layer of coverage. In a situation where the resulting rate increases are greater than those listed in Appendix A for their coverage, we will continue to offer them a premium credit in order to limit their respective rate increases to the amounts listed in Appendix A.

For those group clients that transferred to us from an external carrier, we will continue to recognize any assets transferred from the prior carrier. We will continue to provide these credits to the insureds within those groups and the rate increase will be calculated based on the insureds' net premium rate.

## **17. Analysis Performed**

The initial premium schedule was based on the originally filed pricing assumptions which were believed to be appropriate, given company and industry experience available, when the initial rate schedule was developed.

The original pricing assumptions for morbidity, voluntary termination rates, and mortality were as follows:

### Morbidity

Claim assumptions were derived using data published by the National Center for Health Statistics National Nursing Home Survey (1985 and 1995), the National Health Interview Survey (1984), the National Long-Term Care Survey (1982, 1984, 1989, 1994, and 1999), Medicare data, and other experience furnished to us by consultants, with adjustments due to the impact of underwriting, inflation options, elected options, anti-selection considerations, and the savings incurred because the maximum daily benefit will not always be paid.

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Below are the original sample annual claim costs for a P-FACE(2002-2) policy, \$10 daily benefit, and 5yr LMB which include a 5.0% margin for moderately adverse experience:

Issue Age 45		
Age	FPO	ABI
45	3.21	3.43
50	4.26	5.15
55	7.09	10.29
60	10.37	18.87
65	18.36	42.64
70	33.85	101.49
75	65.14	252.15
80	129.08	645.33
85	223.42	1,440.03
90	318.61	2,641.72

Issue Age 50		
Age	FPO	ABI
50	3.97	4.23
55	5.96	7.22
60	10.61	15.54
65	19.02	34.96
70	35.25	82.99
75	64.96	196.70
80	128.74	502.61
85	222.56	1,119.37
90	316.36	2,046.26

Issue Age 60		
Age	FPO	ABI
60	5.46	5.83
65	16.07	19.69
70	37.49	55.98
75	70.24	131.87
80	134.18	321.43
85	223.01	684.88
90	319.28	1,258.20

**Voluntary Terminations**

The initial premium schedule was based on the originally filed pricing assumptions which were believed to be appropriate, given company and industry experience available, when the initial rate schedule was developed.

Duration	30	40	45	50	55	60	65	70
1	10.00%	10.00%	7.00%	7.00%	6.50%	6.50%	6.00%	6.00%
2	9.00%	9.00%	6.00%	5.50%	5.50%	5.00%	5.00%	5.00%
3	8.50%	8.50%	5.00%	5.00%	4.00%	4.00%	4.00%	4.00%
4	7.50%	7.50%	4.50%	4.50%	3.50%	3.50%	3.50%	4.00%
5	4.50%	4.00%	3.00%	2.75%	2.75%	2.75%	2.75%	2.75%
6	4.50%	4.00%	3.00%	2.75%	2.75%	2.75%	2.75%	2.75%
7	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
8	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
9	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%
10	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%	1.75%

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Mortality

The 1994 Group Annuity Mortality Table was used, weighted 40% males and 60% females, with the following selection factors applied:

Duration	Selection Factor
1	20.0%
2	30.0%
3	40.0%
4	50.0%
5	60.0%
6	70.0%
7	80.0%
8	85.0%
9	90.0%
10	95.0%
11+	100.0%

In addition, future improvements of 1% per year were reflected.

**The following tables show in aggregate how our new assumptions (excluding the moderately adverse margin) compare to actual experience:**

Morbidity

Experience period: Inception through 9/30/2012 for incidence, inception through 9/30/2011 for claim terminations and salvage

The following charts show key experience compared to revised assumptions.

**Incidence**

Duration	A/E
1-3	114%
4-6	106%
7-9	99%
10+	100%
<b>Total</b>	<b>102%</b>

**Claim Terminations**

Continuance	A/E
<b>Total</b>	<b>99%</b>

**Salvage**

Amount Paid	A/E
<b>Total</b>	<b>103%</b>

While we usually complete triennial studies, we found that our quarterly morbidity A/E from Q3-2013 to Q2-2015 (the point at which we would have started the next study) averaged 100%. Therefore, we are still comfortable with the assumptions set based on 2012 data.

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Voluntary Lapses

Experience period: 4/1/2009-3/31/2012

	A/E by Amount	
Duration	UW	GI
1	73%	100%
2	72%	101%
3-5	84%	97%
6-10	93%	103%
11+	100%	100%
<b>Total</b>	<b>85%</b>	<b>100%</b>

We increased ultimate lapse rates slightly (in the range of 0.1% to 0.2%), consistent with experience, which slightly lowered the loss ratio.

Note that we are no longer selling Group business. Early durations are no longer applicable.

Mortality

Experience period: 4/1/2009-3/31/2012

	A/E by Amount	
Duration	UW	GI
1-5	118%	105%
6-10	105%	104%
11-15	92%	101%
16+	98%	94%
<b>Total</b>	<b>100%</b>	<b>101%</b>

While we usually complete triennial studies, we found that our quarterly termination A/E from Q3-2013 to Q2-2015 (the point at which we would have started the next study) averaged 99%. Therefore, we are still comfortable with the assumptions set based on 2012 data.

**18. Experience – Past & Future**

**Exhibit 1** contains nationwide past premium and claims experience and future premium and claim projections and illustrates that the anticipated lifetime loss ratio with the requested rate increase is 91.7%, well in excess of the minimum loss ratio of 60% as well as greater than the original pricing loss ratio of 84.0%. The lifetime loss ratio as of 12/31/2015 is calculated as the sum of accumulated past and discounted future claims divided by the sum of accumulated past and discounted future earned premium where accumulation and discounting occur at the maximum statutory valuation discount rate. In Exhibit 1, the proposed rate increase is applied historically (starting in calendar year 2012). Please refer to the cover letter for background on this modeling assumption.

In addition, **Exhibit 1** contains the original expected loss ratio projections, adjusted for the actual mix of business issued, with the lifetime loss ratio also calculated as stated above.

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Furthermore, **Exhibit 1** demonstrates that the sum of the accumulated value of incurred claims without the inclusion of active life reserves, and the present value of future projected incurred claims, without the inclusion of active life reserves, will not be less than the sum of the following:

1. Accumulated value of the initial earned premium times the original assumed lifetime loss ratio (which was higher than 58%),
2. 85% of the accumulated value of prior premium rate schedule increases,
3. Present value of future projected initial earned premium times the original assumed lifetime loss ratio, and
4. 85% of the present value of future projected premium in excess of the projected initial earned premium.

Note that rate increases will only apply once the applicable group policy rate guarantee has expired.

#### **19. New inflation options that will allow certificate holders to avoid the rate increase**

Although this is a closed block of business, we are filing new future inflation options that will allow certificate holders that have a fixed Compound Inflation (Automatic Benefit Increase or ABI) coverage the option to completely avoid the rate increase.

Under these new options, the certificate holders get to keep their current accumulated Daily benefit and their current remaining Lifetime Maximum Benefit, but the future indexation rate will be reduced as follows:

- For certificate holders that are currently receiving a 5% inflation benefit, the annual inflation rate will be reduced from 5% to a future annual rate of 4.5%
- For certificate holders that have previously reduced their inflation rate in order to avoid a rate increase and are currently receiving inflation benefits of 3.2% for benefit periods less than 10 years and 2.3% for benefit periods 10 years or greater, the future annual inflation rate will be reduced to 2.5% for benefit periods less than 10 years and 1.6% for benefit periods 10 years or greater.

The indexation rates of 4.5%, 2.5% and 1.6% were determined to be actuarially equivalent to the requested rate increases in aggregate and therefore these options are only available if the full rate increase requested is accepted.

The premium rate schedules for these options are included in this filing as **Appendices C1 and C2**.

#### **20. History of Previous Rate Revisions**

A 44.8% rate increase on these policy forms was accepted by your state on February 17, 2011.

#### **21. Ensuring No Cross-Subsidization Between States**

We have ensured no state's rate increase approvals will subsidize other states' experience. Rate increases will vary by state, but only to reflect the timing and amount of prior rate increases approved by that state. This is accomplished by first backing-out all prior rate increases from our nationwide premium data. We then re-introduce prior rate increases with the amount and timing based on your state's prior approvals (as detailed in Section 20). The current proposed rate increases are then determined based on the amounts needed in order to achieve our target loss ratios where our targets reflect the lifetime loss ratios certified to in our prior filing.

Although some states may have capped our previous inforce rate increase filings, in each case this was done with the understanding that the full amount of the proposed rate increases were justified and that John Hancock



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would be refiling for the remainder at a later date. In instances where the remainder remains unapproved, it has been included in the current filings.

## **22. Past Losses Testing**

Preventing companies from recouping past losses was the subject of a recent discussion by the NAIC in late 2013. The accepted methodology, which was incorporated into the 2014 LTC Model Regulation, defines past losses as actual past claims less expected past claims when determining loss ratio compliance where expected past claims are defined as the following:

Expected claims shall be calculated based on the original filing assumptions assumed until new assumptions are filed as part of a rate increase. New assumptions shall be used for all periods beyond each requested effective date of a rate increase regardless of whether or not the rate increase is approved. Expected claims are calculated for each calendar year based on the in-force during the calendar year. Expected claims shall include margins for moderately adverse experience; the margins included in the claims that were used to determine the lifetime loss ratio consistent with the original filing or as modified in any rate increase filing.

We apply this methodology in **Exhibit 1A**. The ‘Adjusted Expected Incurred Claims’ are initially calculated by applying the original pricing loss ratio to the actual earned premium in a given calendar year. Later, in years in which we filed for inforce rate increases, expected incurred claims are based on the new assumptions that were filed at that time.

## **23. Proposed Effective Date**

These rates will not be effective until after we have satisfied the required 60 days advance notice to the policyholder and to the insureds.

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**24. Actuarial Certification**

I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries, and I meet the Academy's qualification standards for rendering this opinion and am familiar with the requirements for filing long-term care insurance premiums and filing for increases in long-term care insurance premiums. This memorandum has been prepared in conformity with all applicable Actuarial Standards of Practice, including ASOP No. 8.

The preceding Actuarial Memorandum contains:

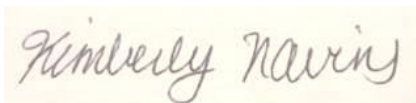
- a) the assumptions on which this certification is based;
- b) the adjustments to prior assumptions with an explanation of the reasons previous assumptions were not realized;
- c) a lifetime projection of the prior premium rate schedules and incurred claims plus future expected premiums and claims which demonstrates that the revised premium rate schedule meets the loss ratios standards and necessary details of this state; and
- d) disclosure of the manner, if any, in which reserves have been recognized.

If the requested premium rate schedule increase is implemented and the underlying assumptions which reflect moderately adverse conditions are realized, no further premium rate schedule increases are anticipated.

I have reviewed and taken into consideration the policy design and coverage provided, and our current underwriting and claims adjudication processes.

In forming my opinion, I have used actuarial assumptions and actuarial methods and such tests of the actuarial calculations as I considered necessary. Based on these assumptions or statutory requirements where necessary, the premium rate filing is in compliance with the loss ratio standards of this state.

The basis for contract reserves has been previously filed and there is no anticipation of any changes.



---

Kimberly Navins, FSA, MAAA  
Actuary  
John Hancock Life Insurance Company (U.S.A.)

**Exhibit 1: Nationwide Loss Ratio Exhibit  
Care Choice (P-GLTC(2002-2) PA)**

	Original Assumptions			Historical & Projected Experience					
	Calendar Year	Incurred Claims	Earned Premium	Incurred Loss Ratio	Before Proposed Increase			With Proposed Rate Increase	
					Incurred Claims	Earned Premium	Incurred Loss Ratio	Incurred Claims	Earned Premium
Historical Experience	1988	-	-	-	-	13,818	0%	-	13,818
	1989	-	-	-	-	21,913	0%	-	21,913
	1990	-	-	-	-	208,922	0%	-	208,922
	1991	-	-	-	-	642,881	0%	-	642,881
	1992	-	-	-	-	833,221	0%	-	833,221
	1993	-	-	-	134	991,912	0%	134	991,912
	1994	-	-	-	-	1,864,540	0%	-	1,864,540
	1995	-	-	-	-	2,925,155	0%	-	2,925,155
	1996	-	-	-	12,665	3,371,808	0%	12,665	3,371,808
	1997	-	-	-	-	3,861,964	0%	-	3,861,964
	1998	-	-	-	-	4,095,544	0%	-	4,095,544
	1999	-	-	-	-	5,000,072	0%	-	5,000,072
	2000	-	-	-	-	6,333,535	0%	-	6,333,535
	2001	-	-	-	-	6,960,988	0%	-	6,960,988
	2002	-	-	-	-	7,911,777	0%	-	7,911,777
	2003	509,636	4,845,050	11%	6,454	13,750,467	0%	6,454	13,750,467
	2004	1,673,263	17,363,179	10%	1,783,644	37,936,848	5%	1,783,644	37,936,848
	2005	3,204,184	32,286,572	10%	5,763,357	40,683,914	14%	5,763,357	40,683,914
	2006	5,252,667	49,737,743	11%	6,646,734	60,257,833	11%	6,646,734	60,257,833
	2007	7,698,354	71,433,138	11%	7,713,359	90,416,518	9%	7,713,359	90,416,518
Projected Future Experience	2008	11,310,542	100,728,070	11%	13,925,013	129,455,072	11%	13,925,013	129,455,072
	2009	16,001,529	132,047,975	12%	17,080,052	128,101,000	13%	17,080,052	128,101,000
	2010	21,770,846	161,765,338	13%	18,237,144	155,130,177	12%	18,237,144	155,130,177
	2011	26,501,041	170,064,912	16%	24,516,433	155,960,810	16%	24,516,433	155,960,810
	2012	30,899,526	170,405,024	18%	31,155,792	190,852,848	16%	31,155,792	199,223,263
	2013	34,836,482	167,680,808	21%	31,468,380	191,798,983	16%	31,468,380	202,715,867
	2014	39,106,732	163,539,147	24%	35,292,728	192,903,048	18%	35,292,728	206,417,891
	2015	44,228,702	161,758,945	27%	46,562,193	194,847,954	24%	46,562,193	223,716,615
	2016	49,397,673	157,106,737	31%	48,959,081	193,264,964	25%	48,997,746	222,922,151
	2017	54,401,435	151,404,073	36%	54,876,980	190,135,387	29%	54,426,083	217,838,371
	2018	59,347,573	145,882,536	41%	61,535,464	185,691,363	33%	59,764,348	208,078,152
	2019	64,375,235	140,452,085	46%	69,089,045	181,411,317	38%	67,155,224	203,282,107
	2020	69,750,293	135,101,163	52%	77,459,698	177,243,096	44%	75,329,113	198,611,369
	2021	75,579,486	129,779,641	58%	86,801,694	173,147,397	50%	84,435,846	194,021,896
	2022	81,733,464	124,496,299	66%	97,335,002	169,077,050	58%	94,690,450	189,460,832
	2023	88,295,204	119,242,055	74%	109,234,527	164,983,378	66%	106,264,242	184,873,630
	2024	95,269,409	114,014,082	84%	122,341,700	160,829,169	76%	119,005,713	180,218,593
	2025	102,593,448	108,820,337	94%	136,615,036	156,578,157	87%	132,875,105	175,455,083
	2026	110,198,331	103,660,401	106%	152,158,695	152,198,917	100%	147,973,173	170,547,886
	2027	118,041,368	98,537,013	120%	169,017,279	147,663,149	114%	164,343,434	165,465,289
Total	2028	126,018,477	93,454,094	135%	188,016,083	142,943,263	132%	182,785,060	160,176,378
	2029	134,060,723	88,417,685	152%	208,924,205	138,005,460	151%	203,076,184	154,643,278
	2030	142,088,692	83,433,868	170%	230,630,229	132,832,973	174%	224,140,518	148,847,200
	2031	150,018,756	78,509,185	191%	252,955,998	127,422,430	199%	245,803,877	142,784,366
	2032	157,786,811	73,651,121	214%	275,362,912	121,777,190	226%	267,543,518	136,458,542
	2033	165,309,738	68,871,829	240%	297,161,509	115,907,660	256%	288,690,619	129,881,386
	2034	172,502,114	64,185,896	269%	318,108,115	109,833,130	290%	309,007,381	123,074,516
	2035	179,225,217	59,606,855	301%	337,788,674	103,582,684	326%	328,090,653	116,070,522
	2036	185,297,664	55,148,077	336%	355,657,558	97,196,951	366%	345,410,693	108,914,930
	2037	190,493,413	50,821,964	375%	370,552,575	90,727,099	408%	359,841,744	101,665,078
	2038	194,680,492	46,645,051	417%	381,750,675	84,231,752	453%	370,683,359	94,386,658
	2039	197,798,142	42,633,808	464%	390,152,548	77,771,336	502%	378,806,055	87,147,380
	2040	199,672,763	38,801,762	515%	395,744,785	71,405,069	554%	384,196,485	80,013,602
<b>Values as of 12/31/2015 (discounted at maximum statutory valuation rates)</b>									
Past :	284,042,001	1,700,247,214	16.7%	282,336,827	2,025,810,119	13.9%	282,336,827	2,091,334,388	13.5%
Future :	2,608,072,723	1,741,865,729	149.7%	4,335,491,793	2,500,795,638	173.4%	4,212,518,650	2,813,019,816	149.8%
Lifetime :	2,892,114,725	3,442,112,943	84.0%	4,617,828,620	4,526,605,757	102.0%	4,494,855,477	4,904,354,204	91.7%

**Total Incurred Claims exceed Total Initial Premiums x max(58%, Original Pricing Loss Ratio) + Increased Premiums x max(85%, Original Pricing Loss Ratio)**

Accum. Value of Past Incurred Claims =	282,336,827		Accum Value of Past Initial Prm x 84.0% =	1,545,731,890
Present Value of Future Incurred Claims =	4,212,518,650		Present Value of Future Initial Prm x 84.0% =	1,469,037,856
Total =	4,494,855,477	>=	Accum Value of Prior Increases x 85.0% =	213,900,902
			Present Value of Future Increases x 85.0% =	904,920,721
			Total =	4,133,591,368

**Exhibit 1A: Pass Losses Exhibit  
Care Choice (P-GLTC(2002-2) PA)**

Calendar Year	Loss Ratios to Apply to Actual Premium			Adjusted Expected Incurred Claims	Before Proposed Increase			With Proposed Rate Increase		
	Incurred Claims	Earned Premium	Incurred Loss Ratio*		Incurred Claims	Earned Premium	Incurred Loss Ratio*	Incurred Claims	Earned Premium	Incurred Loss Ratio*
1993	0	0	0%	-	134	991,912	0%	134	991,912	0%
1994	0	0	0%	-	0	1,864,540	0%	0	1,864,540	0%
1995	0	0	0%	-	0	2,925,155	0%	0	2,925,155	0%
1996	0	0	0%	-	12,665	3,371,808	0%	12,665	3,371,808	0%
1997	0	0	0%	-	0	3,861,964	0%	0	3,861,964	0%
1998	0	0	0%	-	0	4,095,544	0%	0	4,095,544	0%
1999	0	0	0%	-	0	5,000,072	0%	0	5,000,072	0%
2000	0	0	0%	-	0	6,333,535	0%	0	6,333,535	0%
2001	0	0	0%	-	0	6,960,988	0%	0	6,960,988	0%
2002	0	0	0%	-	0	7,911,777	0%	0	7,911,777	0%
2003	509,636	4,845,050	11%	1,446,370	6,454	13,750,467	0%	6,454	13,750,467	0%
2004	1,673,263	17,363,179	10%	3,655,915	1,783,644	37,936,848	5%	1,783,644	37,936,848	5%
2005	3,204,184	32,286,572	10%	4,037,553	5,763,357	40,683,914	14%	5,763,357	40,683,914	14%
2006	5,252,667	49,737,743	11%	6,363,665	6,646,734	60,257,833	11%	6,646,734	60,257,833	11%
2007	7,698,354	71,433,138	11%	9,744,194	7,713,359	90,416,518	9%	7,713,359	90,416,518	9%
2008	11,310,542	100,728,070	11%	14,536,237	13,925,013	129,455,072	11%	13,925,013	129,455,072	11%
2009	16,001,529	132,047,975	12%	15,523,236	17,080,052	128,101,000	13%	17,080,052	128,101,000	13%
2010	20,898,158	137,935,710	15%	23,503,232	18,237,144	155,130,177	12%	18,237,144	155,130,177	12%
2011	23,168,954	131,911,399	18%	27,392,999	24,516,433	155,960,810	16%	24,516,433	155,960,810	16%
2012	25,101,280	159,364,080	16%	30,061,045	31,155,792	190,852,848	16%	31,155,792	199,223,263	16%
2013	27,499,564	164,003,234	17%	32,160,271	31,468,380	191,798,983	16%	31,468,380	202,715,867	16%
2014	30,325,163	167,089,860	18%	35,010,002	35,292,728	192,903,048	18%	35,292,728	206,417,891	17%
2015	33,541,896	164,986,241	20%	39,612,817	46,562,193	194,847,954	24%	46,562,193	223,716,615	21%
2016					48,959,081	193,264,964	25%	48,997,746	222,922,151	22%
2017					54,876,980	190,135,387	29%	54,426,083	217,838,371	25%
2018					61,535,464	185,691,363	33%	59,764,348	208,078,152	29%
2019					69,089,045	181,411,317	38%	67,155,224	203,282,107	33%
2020					77,459,698	177,243,096	44%	75,329,113	198,611,369	38%
2021					86,801,694	173,147,397	50%	84,435,846	194,021,896	44%
2022					97,335,002	169,077,050	58%	94,690,450	189,460,832	50%
2023					109,234,527	164,983,378	66%	106,264,242	184,873,630	57%
2024					122,341,700	160,829,169	76%	119,005,713	180,218,593	66%
2025					136,615,036	156,578,157	87%	132,875,105	175,455,083	76%
2026					152,158,695	152,198,917	100%	147,973,173	170,547,886	87%
2027					169,017,279	147,663,149	114%	164,343,434	165,465,289	99%
2028					188,016,083	142,943,263	132%	182,785,060	160,176,378	114%
2029					208,924,205	138,005,460	151%	203,076,184	154,643,278	131%
2030					230,630,229	132,832,973	174%	224,140,518	148,847,200	151%
2031					252,955,998	127,422,430	199%	245,803,877	142,784,366	172%
2032					275,362,912	121,777,190	226%	267,543,518	136,458,542	196%
2033					297,161,509	115,907,660	256%	288,690,619	129,881,386	222%
2034					318,108,115	109,833,130	290%	309,007,381	123,074,516	251%
2035					337,788,674	103,582,684	326%	328,090,653	116,070,522	283%
2036					355,657,558	97,196,951	366%	345,410,693	108,914,930	317%
2037					370,552,575	90,727,099	408%	359,841,744	101,665,078	354%
2038					381,750,675	84,231,752	453%	370,683,359	94,386,658	393%
2039					390,152,548	77,771,336	502%	378,806,055	87,147,380	435%
2040					395,744,785	71,405,069	554%	384,196,485	80,013,602	480%
2041					398,183,885	65,190,006	611%	386,523,106	73,049,256	529%
2042					397,125,889	59,176,180	671%	385,454,449	66,310,409	581%
2043					392,594,221	53,409,081	735%	381,015,153	59,848,033	637%
2044					385,342,275	47,924,683	804%	373,935,962	53,702,441	696%
2045					376,001,171	42,750,392	880%	364,828,960	47,904,341	762%
Value as of 12/31/15*:										
	Past			282,613,663	282,336,827	2,025,810,119	13.9%	282,336,827	2,091,334,388	13.5%
	Future				4,335,491,793	2,500,795,638	173.4%	4,212,518,650	2,813,019,816	149.8%
	Lifetime				4,617,828,620	4,526,605,757	102.0%	4,494,855,477	4,904,354,204	91.7%

\*discounted at maximum statutory valuation rates

**Test: Total Incurred Claims exceeds the Total Initial Premiums x Original Pricing Loss Ratio (instead of 58%) + Increased Premiums x 85%**

Accum Value of Minimum (Past Incurred Claims, Adjusted Originally Expected Incurred Claims) =	282,336,827		Accum Value of Past Initial Prm x 84.0% =	1,545,731,890
Present Value of Future Incurred Claims =	4,212,518,650		Present Value of Future Initial Prm x 84.0% =	1,469,037,856
Total =	4,494,855,477	> =	Accum Value of Prior Increases x 85.0% =	213,900,902
			Present Value of Future Increases x 85.0% =	904,920,721
			Total	4,133,591,368

**Appendix A - Comparison to New Business Rates (Care Choice P-GLTC(2002-2) PA)**

Rates shown are for a 90-day EP, 75% HHC benefit, and are per \$5 monthly benefit

**Inflation Option: Future Purchase Option****New Business Rates adjusted for Benefit Differences :**

Issue Age	Benefit Period								
	2	3	4	5	6	7	8	10	Life
18-29	0.88	1.02	1.09	1.11	1.24	1.31	1.51	2.17	2.45
30	0.93	1.07	1.16	1.17	1.29	1.37	1.58	2.17	2.45
31	0.99	1.14	1.16	1.17	1.29	1.37	1.58	2.17	2.45
32	0.99	1.14	1.19	1.22	1.36	1.43	1.66	2.22	2.54
33	0.99	1.14	1.19	1.22	1.36	1.43	1.66	2.22	2.54
34	0.99	1.14	1.23	1.28	1.43	1.51	1.75	2.37	2.72
35	0.99	1.14	1.23	1.28	1.43	1.51	1.75	2.38	2.75
36	0.99	1.14	1.23	1.28	1.43	1.51	1.75	2.40	2.78
37	0.99	1.14	1.26	1.35	1.50	1.59	1.84	2.40	2.78
38	0.99	1.15	1.26	1.35	1.51	1.59	1.84	2.57	2.99
39	0.99	1.15	1.26	1.35	1.53	1.61	1.87	2.62	3.06
40	0.99	1.15	1.26	1.37	1.54	1.63	1.88	2.66	3.11
41	1.02	1.22	1.28	1.39	1.59	1.68	1.94	2.76	3.24
42	1.02	1.23	1.40	1.52	1.73	1.83	2.12	2.87	3.38
43	1.10	1.34	1.42	1.55	1.78	1.89	2.18	2.98	3.51
44	1.21	1.36	1.55	1.70	1.85	1.95	2.26	3.11	3.67
45	1.32	1.48	1.59	1.74	2.01	2.13	2.46	3.24	3.83
46	1.34	1.51	1.75	1.81	2.10	2.22	2.57	3.41	4.03
47	1.48	1.66	1.80	1.87	2.19	2.31	2.68	3.58	4.24
48	1.61	1.72	1.88	2.05	2.40	2.54	2.94	3.79	4.50
49	1.64	1.87	2.06	2.14	2.51	2.65	3.07	3.85	4.58
50	1.80	1.94	2.14	2.23	2.64	2.79	3.23	4.08	4.86
51	1.87	2.02	2.27	2.39	2.83	2.99	3.46	4.27	5.10
52	2.05	2.24	2.50	2.53	3.03	3.20	3.71	4.61	5.36
53	2.13	2.36	2.64	2.82	3.38	3.58	4.14	4.86	5.66
54	2.37	2.63	2.94	3.00	3.62	3.83	4.43	5.11	5.97
55	2.45	2.76	3.11	3.22	3.89	4.11	4.76	5.40	6.32
56	2.59	3.00	3.27	3.41	4.13	4.36	5.05	5.84	6.70
57	2.76	3.12	3.60	3.63	4.38	4.63	5.36	6.16	7.10
58	2.96	3.40	3.80	3.86	4.55	4.81	5.56	6.55	7.58
59	3.01	3.57	4.06	4.15	4.87	5.15	5.96	6.97	7.94
60	3.24	3.78	4.35	4.47	5.12	5.41	6.26	7.47	8.40
61	3.47	4.14	4.62	4.81	5.56	5.88	6.81	8.11	9.18
62	3.73	4.40	5.07	5.21	6.09	6.44	7.46	8.88	9.96
63	3.93	4.87	5.45	5.67	6.69	7.07	8.18	9.60	10.99
64	4.29	5.25	5.74	6.20	7.39	7.82	9.05	10.47	11.88
65	4.57	5.71	6.26	6.66	8.03	8.49	9.83	11.44	13.06
66	5.03	6.22	6.76	7.28	8.58	9.07	10.50	12.39	14.22
67	5.44	6.73	7.40	7.88	9.10	9.62	11.13	13.34	15.41
68	5.95	7.18	8.02	8.62	9.77	10.33	11.96	14.51	16.68
69	6.55	7.90	8.79	9.38	10.34	10.93	12.66	15.59	18.20
70	7.15	8.47	9.57	10.15	11.07	11.70	13.54	16.90	19.81
71	7.93	9.34	10.45	11.26	12.03	12.72	14.72	18.93	21.95
72	8.76	10.27	11.45	12.49	13.11	13.86	16.05	21.19	24.35
73	9.69	11.31	12.56	13.79	14.33	15.15	17.54	23.70	27.04
74	10.81	12.45	13.69	15.38	15.63	16.52	19.13	26.56	30.14
75	11.90	13.78	14.99	16.99	17.09	18.07	20.92	29.72	33.42
76	13.23	15.53	16.99	19.32	19.37	20.48	23.71	33.52	37.69
77	14.79	17.59	19.22	21.82	21.96	23.22	26.88	38.06	42.64
78	16.50	19.77	21.73	24.79	24.92	26.35	30.50	42.94	48.20
79	18.43	22.36	24.59	28.07	28.22	29.83	34.53	48.63	54.53
80	30.56	25.18	27.88	31.85	32.05	33.88	39.22	54.92	61.61
81	32.99	27.66	30.66	35.05	35.29	37.30	43.18	60.37	67.74
82	35.25	29.90	33.19	37.87	38.18	40.36	46.72	65.30	73.32
83	38.28	33.41	37.03	42.34	42.63	45.07	52.17	72.98	81.86
84	41.09	36.55	40.51	46.43	46.74	49.41	57.20	79.94	89.68

**P-GLTC(2002-2) PA Rates after Requested Rate Increases**

excluding additional rate increase due to cost of delay :

Issue Age	Benefit Period								
	2	3	4	5	6	7	8	10	Life
18-29	0.44	0.53	0.59	0.62	0.65	0.69	0.73	0.91	1.01
30	0.44	0.53	0.59	0.62	0.65	0.69	0.73	0.91	1.01
31	0.46	0.55	0.61	0.64	0.68	0.72	0.76	0.94	1.04
32	0.47	0.58	0.64	0.67	0.70	0.74	0.79	0.98	1.08
33	0.49	0.60	0.66	0.69	0.73	0.77	0.82	1.01	1.12
34	0.51	0.62	0.68	0.72	0.75	0.80	0.85	1.05	1.16
35	0.53	0.64	0.71	0.75	0.78	0.83	0.88	1.09	1.21
36	0.55	0.66	0.73	0.77	0.81	0.86	0.91	1.13	1.25
37	0.57	0.69	0.76	0.80	0.84	0.89	0.95	1.17	1.30
38	0.59	0.71	0.79	0.83	0.87	0.92	0.98	1.21	1.35
39	0.61	0.74	0.82	0.86	0.91	0.96	1.02	1.26	1.40
40	0.63	0.77	0.85	0.89	0.94	0.99	1.06	1.31	1.45
41	0.67	0.81	0.90	0.95	0.99	1.05	1.12	1.38	1.53
42	0.71	0.86	0.95	1.00	1.05	1.11	1.18	1.46	1.62
43	0.75	0.91	1.01	1.06	1.12	1.18	1.25	1.55	1.72
44	0.80	0.97	1.07	1.12	1.18	1.25	1.33	1.64	1.82
45	0.85	1.02	1.13	1.19	1.25	1.32	1.40	1.74	1.93
46	0.90	1.09	1.20	1.27	1.33	1.41	1.50	1.85	2.05
47	0.96	1.16	1.28	1.35	1.42	1.50	1.59	1.97	2.19
48	1.02	1.24	1.37	1.44	1.51	1.60	1.70	2.10	2.33
49	1.09	1.32	1.45	1.53	1.61	1.70	1.81	2.23	2.48
50	1.16	1.40	1.55	1.63	1.71	1.81	1.93	2.38	2.64
51	1.24	1.50	1.66	1.74	1.83	1.93	2.06	2.54	2.82
52	1.32	1.60	1.77	1.86	1.96	2.07	2.21	2.72	3.02
53	1.42	1.71	1.89	1.99	2.09	2.21	2.36	2.91	3.23
54	1.51	1.83	2.03	2.13	2.24	2.37	2.53	3.11	3.45
55	1.62	1.96	2.17	2.28	2.40	2.53	2.71	3.33	3.70
56	1.74	2.11	2.33	2.45	2.57	2.72	2.95	3.58	3.97
57	1.87	2.27	2.50	2.64	2.77	2.93	3.22	3.85	4.27
58	2.01	2.44	2.69	2.83	2.97	3.14	3.51	4.14	4.59
59	2.16	2.62	2.89	3.04	3.20	3.38	3.82	4.44	4.93
60	2.32	2.81	3.11	3.27	3.44	3.63	4.17	4.78	5.30
61	2.53	3.06	3.38	3.56	3.74	3.95	4.57	5.19	5.76
62	2.75	3.33	3.67	3.87	4.06	4.29	4.97	5.65	6.27
63	2.99	3.62	3.99	4.20	4.42	4.67	5.40	6.14	6.81
64	3.25	3.93	4.34	4.57	4.80	5.07	5.87	6.67	7.41
65	3.53	4.27	4.72	4.97	5.22	5.52	6.39	7.26	8.05
66	3.85	4.66	5.15	5.42	5.69	6.01	6.96	7.91	8.78
67	4.19	5.08	5.61	5.90	6.20	6.55	7.59	8.62	9.56
68	4.57	5.53	6.11	6.43	6.76	7.14	8.27	9.39	10.42
69	4.98	6.03	6.66	7.01	7.36	7.78	9.01	10.24	11.36
70	5.43	6.57	7.26	7.64	8.03	8.48	9.82	11.16	12.38
71	6.09	7.38	8.15	8.58	9.01	9.52	11.03	12.53	13.90
72	6.84	8.28	9.15	9.63	10.11	10.69	12.38	13.89	14.84
73	7.68	9.30	10.27	10.81	11.35	12.00	13.90	14.78	15.79
74	8.37	10.44	11.53	12.14	12.75	13.48	15.09	15.70	16.77
75	8.82	11.39	12.95	13.63	14.31	15.13	16.01	16.65	17.79
76	9.28	12.06	13.87	15.07	15.80	16.28	16.96	17.64	18.84
77	9.75	12.75	14.66	15.94	16.70	17.21	17.93	18.65	19.92
78	10.22	13.45	15.47	16.82	17.62	18.16	18.92	19.68	21.02
79	10.69	14.17	16.29	17.71	18.56	19.13	19.92	20.72	22.14
80	11.16	14.89	17.12	18.61	19.50	20.10	20.93	21.77	23.26
81	12.28	16.37	18.83	20.47	21.45	22.11	23.03	23.95	25.58
82	13.40	17.86	20.54	22.33	23.40	24.11	25.12	26.12	27.91
83	14.85	19.80	22.77	24.75	25.94	26.73	27.84	28.95	30.93
84	16.30	21.73	24.99	27.17	28.47	29.34	30.56	31.78	33.96

\* Benefit Differences between P-GLTC(2002-2) PA and P-FACE (2009):

- P-FACE 2009 Group rates are approximated by applying the ratio of [ICC12-LTC-12 / LTC-03] Retail rates to P-FACE 2009 rates (P-FACE 2009 was the last Group LTC product offered, but would increase by a compa

- ICC12-LTC-12 10yr and Lifetime rates are approximated by applying the ratio of [LTC-03 Lifetime (or 10yr) / LTC-03 6yr] to the ICC12-LTC-12 6yr rates (LTC-03 was the last product in which we offered 10yr or Lifetime

- An additional 3% factor was applied to account reflect differences in EP: LTC-03 has an EP where 1 day of HHC = 7 days towards EP, and ICC12-LTC-12 is a true service-day EP

- ICC12-LTC-12 unisex rates are determined by assuming a 60% female / 40% male mix of business.

- P-FACE 2009 rates were increased by an additional 9.5%, accounting for the average increase to premium rates for ICC12-LTC-12 if they were still being sold in 2016.

**Appendix A - Comparison to New Business Rates (Care Choice P-GLTC(2002-2) PA)**

Rates shown are for a 90-day EP, 75% HHC benefit, and are per \$5 monthly benefit

**Inflation Option: Future Purchase Option****P-GLTC(2002-2) PA Rates after Requested Rate Increases**

including additional rate increase due to cost of delay :

Issue Age	Benefit Period								
	2	3	4	5	6	7	8	10	Life
18-29	0.44	0.53	0.59	0.62	0.65	0.69	0.73	0.91	1.01
30	0.44	0.53	0.59	0.62	0.65	0.69	0.73	0.91	1.01
31	0.46	0.55	0.61	0.64	0.68	0.72	0.76	0.94	1.04
32	0.47	0.58	0.64	0.67	0.70	0.74	0.79	0.98	1.08
33	0.49	0.60	0.66	0.69	0.73	0.77	0.82	1.01	1.12
34	0.51	0.62	0.68	0.72	0.75	0.80	0.85	1.05	1.16
35	0.53	0.64	0.71	0.75	0.78	0.83	0.88	1.09	1.21
36	0.55	0.66	0.73	0.77	0.81	0.86	0.91	1.13	1.25
37	0.57	0.69	0.76	0.80	0.84	0.89	0.95	1.17	1.30
38	0.59	0.71	0.79	0.83	0.87	0.92	0.98	1.21	1.35
39	0.61	0.74	0.82	0.86	0.91	0.96	1.02	1.26	1.40
40	0.63	0.77	0.85	0.89	0.94	0.99	1.06	1.31	1.45
41	0.67	0.81	0.90	0.95	0.99	1.05	1.12	1.38	1.53
42	0.71	0.86	0.95	1.00	1.05	1.11	1.18	1.46	1.62
43	0.75	0.91	1.01	1.06	1.12	1.18	1.25	1.55	1.72
44	0.80	0.97	1.07	1.12	1.18	1.25	1.33	1.64	1.82
45	0.85	1.02	1.13	1.19	1.25	1.32	1.40	1.74	1.93
46	0.90	1.09	1.20	1.27	1.33	1.41	1.50	1.85	2.05
47	0.96	1.16	1.28	1.35	1.42	1.50	1.59	1.97	2.19
48	1.02	1.24	1.37	1.44	1.51	1.60	1.70	2.10	2.33
49	1.09	1.32	1.45	1.53	1.61	1.70	1.81	2.23	2.48
50	1.16	1.40	1.55	1.63	1.71	1.81	1.93	2.38	2.64
51	1.24	1.50	1.66	1.74	1.83	1.93	2.06	2.54	2.82
52	1.32	1.60	1.77	1.86	1.96	2.07	2.21	2.72	3.02
53	1.42	1.71	1.89	1.99	2.09	2.21	2.36	2.91	3.23
54	1.51	1.83	2.03	2.13	2.24	2.37	2.53	3.11	3.45
55	1.62	1.96	2.17	2.28	2.40	2.53	2.71	3.33	3.70
56	1.74	2.11	2.33	2.45	2.57	2.72	2.95	3.58	3.97
57	1.87	2.27	2.50	2.64	2.77	2.93	3.22	3.85	4.27
58	2.01	2.44	2.69	2.83	2.97	3.14	3.51	4.14	4.59
59	2.16	2.62	2.89	3.04	3.20	3.38	3.82	4.44	4.93
60	2.32	2.81	3.11	3.27	3.44	3.63	4.17	4.78	5.30
61	2.53	3.06	3.38	3.56	3.74	3.95	4.57	5.19	5.76
62	2.75	3.33	3.67	3.87	4.06	4.29	4.97	5.65	6.27
63	2.99	3.62	3.99	4.20	4.42	4.67	5.40	6.14	6.81
64	3.25	3.93	4.34	4.57	4.80	5.07	5.87	6.67	7.41
65	3.53	4.27	4.72	4.97	5.22	5.52	6.39	7.26	8.05
66	3.85	4.66	5.15	5.42	5.69	6.01	6.96	7.91	8.78
67	4.19	5.08	5.61	5.90	6.20	6.55	7.59	8.62	9.56
68	4.57	5.53	6.11	6.43	6.76	7.14	8.27	9.39	10.42
69	4.98	6.03	6.66	7.01	7.36	7.78	9.01	10.24	11.36
70	5.43	6.57	7.26	7.64	8.03	8.48	9.82	11.16	12.38
71	6.09	7.38	8.15	8.58	9.01	9.52	11.03	12.53	13.90
72	6.84	8.28	9.15	9.63	10.11	10.69	12.38	13.89	14.84
73	7.68	9.30	10.27	10.81	11.35	12.00	13.90	14.78	15.79
74	8.37	10.44	11.53	12.14	12.75	13.48	15.09	15.70	16.77
75	8.82	11.39	12.95	13.63	14.31	15.13	16.01	16.65	17.79
76	9.28	12.06	13.87	15.07	15.80	16.28	16.96	17.64	18.84
77	9.75	12.75	14.66	15.94	16.70	17.21	17.93	18.65	19.92
78	10.22	13.45	15.47	16.82	17.62	18.16	18.92	19.68	21.02
79	10.69	14.17	16.29	17.71	18.56	19.13	19.92	20.72	22.14
80	11.16	14.89	17.12	18.61	19.50	20.10	20.93	21.77	23.26
81	12.28	16.37	18.83	20.47	21.45	22.11	23.03	23.95	25.58
82	13.40	17.86	20.54	22.33	23.40	24.11	25.12	26.12	27.91
83	14.85	19.80	22.77	24.75	25.94	26.73	27.84	28.95	30.93
84	16.30	21.73	24.99	27.17	28.47	29.34	30.56	31.78	33.96

**P-GLTC(2002-2) PA 2016 Rate Increases (%) :**

Issue Age	Benefit Period								
	2	3	4	5	6	7	8	10	Life
18-29	16%	16%	16%	16%	16%	16%	16%	16%	16%
30	16%	16%	16%	16%	16%	16%	16%	16%	16%
31	16%	16%	16%	16%	16%	16%	16%	16%	16%
32	16%	16%	16%	16%	16%	16%	16%	16%	16%
33	16%	16%	16%	16%	16%	16%	16%	16%	16%
34	16%	16%	16%	16%	16%	16%	16%	16%	16%
35	16%	16%	16%	16%	16%	16%	16%	16%	16%
36	16%	16%	16%	16%	16%	16%	16%	16%	16%
37	16%	16%	16%	16%	16%	16%	16%	16%	16%
38	16%	16%	16%	16%	16%	16%	16%	16%	16%
39	16%	16%	16%	16%	16%	16%	16%	16%	16%
40	16%	16%	16%	16%	16%	16%	16%	16%	16%
41	16%	16%	16%	16%	16%	16%	16%	16%	16%
42	16%	16%	16%	16%	16%	16%	16%	16%	16%
43	16%	16%	16%	16%	16%	16%	16%	16%	16%
44	16%	16%	16%	16%	16%	16%	16%	16%	16%
45	16%	16%	16%	16%	16%	16%	16%	16%	16%
46	16%	16%	16%	16%	16%	16%	16%	16%	16%
47	16%	16%	16%	16%	16%	16%	16%	16%	16%
48	16%	16%	16%	16%	16%	16%	16%	16%	16%
49	16%	16%	16%	16%	16%	16%	16%	16%	16%
50	16%	16%	16%	16%	16%	16%	16%	16%	16%
51	16%	16%	16%	16%	16%	16%	16%	16%	16%
52	16%	16%	16%	16%	16%	16%	16%	16%	16%
53	16%	16%	16%	16%	16%	16%	16%	16%	16%
54	16%	16%	16%	16%	16%	16%	16%	16%	16%
55	16%	16%	16%	16%	16%	16%	16%	16%	16%
56	16%	16%	16%	16%	16%	16%	16%	16%	16%
57	16%	16%	16%	16%	16%	16%	16%	16%	16%
58	16%	16%	16%	16%	16%	16%	16%	16%	16%
59	16%	16%	16%	16%	16%	16%	16%	16%	16%
60	16%	16%	16%	16%	16%	16%	16%	16%	16%
61	16%	16%	16%	16%	16%	16%	16%	16%	16%
62	16%	16%	16%	16%	16%	16%	16%	16%	16%
63	16%	16%	16%	16%	16%	16%	16%	16%	16%
64	16%	16%	16%	16%	16%	16%	16%	16%	16%
65	16%	16%	16%	16%	16%	16%	16%	16%	16%
66	16%	16%	16%	16%	16%	16%	16%	16%	16%
67	16%	16%	16%	16%	16%	16%	16%	16%	16%
68	16%	16%	16%	16%	16%	16%	16%	16%	16%
69	16%	16%	16%	16%	16%	16%	16%	16%	16%
70	16%	16%	16%	16%	16%	16%	16%	16%	16%
71	16%	16%	16%	16%	16%	16%	16%	16%	16%
72	16%	16%	16%	16%	16%	16%	16%	16%	16%
73	16%	16%	16%	16%	16%	16%	16%	16%	16%
74	16%	16%	16%	16%	16%	16%	16%	16%	16%
75	16%	16%	16%	16%	16%	16%	16%	16%	16%
76	16%	16%	16%	16%	16%	16%	16%	16%	16%
77	16%	16%	16%	16%	16%	16%	16%	16%	16%
78	16%	16%	16%	16%	16%	16%	16%	16%	16%
79	16%	16%	16%	16%	16%	16%	16%	16%	16%
80	16%	16%	16%	16%	16%	16%	16%	16%	16%
81	16%	16%	16%	16%	16%	16%	16%	16%	16%
82	16%	16%	16%	16%	16%	16%	16%	16%	16%
83	16%	16%	16%	16%	16%	16%	16%	16%	16%
84	16%	16%	16%	16%	16%	16%	16%	16%	16%

\* Benefit Differences between P-GLTC(2002-2) PA and P-FACE (2009):

- P-FACE 2009 Group rates are approximated by applying the ratio of [ICC12-LTC-12 / LTC-03] Retail rates to P-FACE 2009 rates (P-FACE 2009 was the last Group LTC product offered, but would increase by a compa

- ICC12-LTC-12 10yr and Lifetime rates are approximated by applying the ratio of [LTC-03 Lifetime (or 10yr) / LTC-03 6yr] to the ICC12-LTC-12 6yr rates (LTC-03 was the last product in which we offered 10yr or Lifetime

- An additional 3% factor was applied to account reflect differences in EP: LTC-03 has an EP where 1 day of HHC = 7 days towards EP, and ICC12-LTC-12 is a true service-day EP

- ICC12-LTC-12 unisex rates are determined by assuming a 60% female / 40% male mix of business.

- P-FACE 2009 rates were increased by an additional 9.5%, accounting for the average increase to premium rates for ICC12-LTC-12 if they were still being sold in 2016.

**Appendix A - Comparison to New Business Rates (Care Choice P-GLTC(2002-2) PA)**

Rates shown are for a 90-day EP, 75% HHC benefit, and are per \$5 monthly benefit

Inflation Option: ABI (5% Compound Inflation)

**New Business Rates adjusted for Benefit Differences\* :**

Issue Age	Benefit Period								
	2	3	4	5	6	7	8	10	Life
18-29	6.94	8.59	9.14	9.74	11.26	11.79	13.58	15.32	16.66
30	6.94	8.59	9.14	9.74	11.26	11.79	13.58	15.32	16.66
31	6.94	8.59	9.14	9.74	11.26	11.79	13.58	15.32	16.66
32	6.94	8.59	9.14	9.74	11.26	11.79	13.58	15.32	16.66
33	6.94	8.59	9.14	9.74	11.26	11.79	13.58	15.32	16.66
34	6.94	8.59	9.14	9.74	11.26	11.79	13.58	15.32	16.66
35	6.94	8.59	9.14	9.74	11.26	11.79	13.58	15.32	16.66
36	7.10	8.60	9.14	9.74	11.30	11.83	13.63	15.42	16.66
37	7.11	8.79	9.14	9.79	11.39	11.93	13.74	15.44	16.66
38	7.11	8.84	9.15	9.87	11.48	12.01	13.84	15.62	16.77
39	7.26	8.87	9.20	9.94	11.57	12.12	13.96	15.65	16.85
40	7.27	8.91	9.28	10.03	11.66	12.21	14.07	15.83	16.91
41	7.38	9.07	9.50	10.28	12.04	12.61	14.53	16.41	17.54
42	7.65	9.21	9.74	10.53	12.43	13.01	14.98	16.82	18.18
43	7.77	9.38	9.98	10.79	12.83	13.43	15.47	17.43	18.86
44	8.06	9.72	10.39	11.22	13.23	13.85	15.96	17.87	19.37
45	8.19	9.88	10.64	11.50	13.67	14.32	16.49	18.53	20.11
46	8.35	10.10	10.95	11.84	14.16	14.83	17.08	19.09	20.92
47	8.70	10.33	11.29	12.19	14.51	15.19	17.50	19.86	21.79
48	8.87	10.57	11.62	12.55	15.06	15.76	18.16	20.49	22.52
49	9.24	10.81	11.96	12.92	15.59	16.33	18.81	21.29	23.42
50	9.42	11.06	12.33	13.31	16.17	16.93	19.50	21.96	24.38
51	9.66	11.34	12.67	13.53	16.59	17.37	20.01	22.41	24.92
52	9.91	11.65	13.05	13.93	16.83	17.62	20.30	22.88	25.47
53	10.37	11.96	13.26	14.15	17.27	18.08	20.82	23.54	26.03
54	10.64	12.31	13.63	14.56	17.53	18.35	21.14	24.04	26.62
55	10.93	12.65	14.04	14.83	17.98	18.83	21.69	24.53	27.20
56	11.00	12.85	14.29	15.08	18.35	19.21	22.13	24.98	27.55
57	11.27	13.27	14.57	15.33	18.71	19.59	22.56	25.22	27.89
58	11.35	13.49	14.84	15.60	19.12	20.02	23.06	25.73	28.31
59	11.65	13.76	14.95	15.69	19.32	20.22	23.29	26.21	28.51
60	11.76	14.03	15.27	15.97	19.76	20.68	23.83	26.57	28.99
61	11.88	14.35	15.64	16.36	19.96	20.89	24.07	26.75	29.30
62	12.00	14.84	16.07	16.58	19.99	20.93	24.11	26.79	29.63
63	12.15	15.26	16.36	17.03	20.08	21.02	24.21	26.89	30.03
64	12.36	15.50	16.85	17.34	20.20	21.15	24.36	27.05	30.47
65	12.55	15.97	17.24	17.69	20.36	21.31	24.55	27.25	30.78
66	13.23	16.86	18.19	18.65	21.50	22.51	25.93	29.42	32.98
67	14.10	17.66	19.10	19.71	22.62	23.68	27.27	31.81	35.40
68	14.89	18.52	20.08	20.89	23.89	25.01	28.82	34.27	37.90
69	15.62	19.46	21.18	22.06	25.17	26.35	30.35	36.98	40.66
70	16.57	20.52	22.19	23.33	26.62	27.87	32.11	39.97	43.53
71	18.04	22.00	23.40	24.63	27.82	29.12	33.55	42.09	46.20
72	19.60	23.66	24.59	25.89	29.29	30.66	35.33	44.44	48.93
73	21.29	25.29	25.80	27.33	30.62	32.05	36.92	46.83	51.75
74	23.33	27.11	27.18	28.94	32.09	33.59	38.70	49.30	54.84
75	25.33	29.16	28.61	30.47	33.63	35.21	40.56	51.94	58.13
76	26.92	31.20	30.52	32.35	35.78	37.45	43.15	55.46	61.80
77	28.48	33.19	32.56	34.40	38.13	39.91	45.98	59.19	65.60
78	30.19	35.46	34.78	36.54	40.71	42.62	49.10	63.19	69.76
79	32.00	37.89	37.08	38.82	43.34	45.37	52.26	67.37	74.19
80	49.88	40.51	39.62	41.27	46.17	48.33	55.68	71.95	78.82
81	52.80	44.52	43.61	45.40	50.78	53.16	61.24	79.16	86.73
82	55.54	48.14	47.17	49.11	54.96	57.54	66.29	85.66	93.79
83	59.31	53.79	52.67	54.89	61.36	64.23	74.00	95.60	104.71
84	62.67	58.91	57.73	60.15	67.21	70.36	81.05	104.68	114.63

**P-GLTC(2002-2) PA Rates after Requested Rate Increases**

excluding additional rate increase due to cost of delay :

Issue Age	Benefit Period								
	2	3	4	5	6	7	8	10	Life
18-29	2.63	2.89	3.08	3.21	3.37	3.47	3.61	4.27	4.56
30	2.63	2.89	3.08	3.21	3.37	3.47	3.61	4.27	4.56
31	2.72	2.99	3.20	3.33	3.49	3.60	3.75	4.43	4.73
32	2.80	3.10	3.31	3.46	3.62	3.73	3.89	4.60	4.91
33	2.89	3.21	3.44	3.59	3.76	3.87	4.04	4.77	5.09
34	2.98	3.32	3.56	3.72	3.90	4.02	4.19	4.95	5.29
35	3.07	3.44	3.69	3.86	4.05	4.17	4.35	5.13	5.48
36	3.16	3.56	3.83	4.01	4.20	4.33	4.51	5.33	5.69
37	3.26	3.68	3.97	4.16	4.36	4.49	4.68	5.53	5.90
38	3.36	3.81	4.11	4.31	4.52	4.66	4.85	5.73	6.13
39	3.47	3.95	4.26	4.48	4.69	4.83	5.04	5.95	6.36
40	3.58	4.09	4.42	4.64	4.87	5.02	5.22	6.17	6.60
41	3.64	4.19	4.55	4.79	5.02	5.17	5.38	6.36	6.80
42	3.70	4.30	4.68	4.93	5.17	5.33	5.55	6.56	7.01
43	3.76	4.41	4.82	5.08	5.33	5.49	5.72	6.76	7.22
44	3.82	4.53	4.95	5.24	5.49	5.66	5.89	6.96	7.44
45	3.89	4.64	5.10	5.40	5.66	5.83	6.08	7.18	7.67
46	4.04	4.82	5.30	5.61	5.88	6.06	6.32	7.46	7.97
47	4.20	5.00	5.50	5.84	6.12	6.30	6.57	7.76	8.29
48	4.37	5.18	5.71	6.07	6.36	6.55	6.83	8.07	8.62
49	4.54	5.37	5.94	6.31	6.61	6.81	7.10	8.38	8.96
50	4.72	5.57	6.17	6.56	6.87	7.08	7.38	8.72	9.31
51	4.92	5.83	6.46	6.88	7.21	7.43	7.74	9.14	9.77
52	5.14	6.10	6.77	7.21	7.56	7.79	8.12	9.59	10.24
53	5.36	6.39	7.09	7.57	7.93	8.17	8.51	10.06	10.74
54	5.59	6.68	7.43	7.93	8.32	8.57	8.93	10.55	11.27
55	5.83	6.99	7.79	8.32	8.72	8.99	9.36	11.06	11.82
56	6.24	7.49	8.36	8.94	9.37	9.65	10.06	11.88	12.69
57	6.68	8.03	8.97	9.47	9.76	10.21	10.80	12.76	13.64
58	7.09	8.59	9.49	9.81	10.10	10.57	11.61	13.71	14.65
59	7.34	8.89	9.83	10.15	10.45	10.94	12.47	14.25	15.66
60	7.60	9.21	10.17	10.50	10.82	11.33	13.05	14.75	16.21
61	7.92	9.59	10.60	10.94	11.27	11.80	13.59	15.37	16.89
62	8.25	9.99	11.04	11.40	11.74	12.30	14.16	16.01	17.59
63	8.60	10.41	11.50	11.88	12.24	12.81	14.76	16.68	18.33
64	8.95	10.85	11.98	12.38	12.75	13.35	15.37	17.38	18.97
65	9.33	11.30	12.48	12.89	13.28	13.90	16.02	18.11	19.49
66	9.75	11.81	13.05	13.48	13.89	14.54	16.75	18.93	20.27
67	10.20	12.35	13.64	14.09	14.52	15.20	17.51	19.72	21.07
68	10.66	12.91	14.26	14.73	15.18	15.89	18.30	20.48	21.88
69	11.14	13.50	14.91	15.40	15.87	16.61	19.13	21.24	22.69
70	11.65	14.11	15.59	16.10	16.59	17.36	20.00	22.01	23.51
71	12.53	15.25	16.85	17.41	17.93	18.77	21.62	23.05	24.62
72	13.02	16.48	18.21	18.81	19.38	20.29	23.18	24.11	25.75
73	13.51	17.22	19.68	20.33	20.94	21.93	24.21	25.18	26.90
74	14.00	17.96	20.66	21.98	22.64	23.70	25.26	26.27	28.06
75	14.49	18.71	21.52	23.39	24.47	25.26	26.31	27.36	29.23
76	14.97	19.46	22.38	24.32	25.49	26.27	27.36	28.46	30.40
77	15.45	20.20	23.23	25.25	26.46	27.27	28.40	29.54	31.56
78	15.90	20.93	24.07	26.16	27.42	28.26	29.43	30.61	32.70
79	16.34	21.64	24.89	27.05	28.35	29.22	30.43	31.65	33.82
80	16.75	22.33	25.68	27.91	29.25	30.14	31.40	32.66	34.89
81	18.42	24.56	28.25	30.70	32.18	33.16	34.54	35.92	38.38
82	20.10	26.79	30.81	33.49	35.10	36.17	37.68	39.19	41.87
83	22.27	29.70	34.15	37.12	38.90	40.09	41.76	43.43	46.40
84	24.45	32.60	37.49	40.75	42.71	44.01	45.84	47.68	50.94

\* Benefit Differences between P-GLTC(2002-2) PA and P-FACE (2009):

- The P-FACE (2009) ABI option increases the benefits and remaining LMB by 5% per year compounded. The P-FACE (2002-2) ABI option increases the DMB by 5% per year; the new LMB is calculated as the DMB times the ratio of [ICC12-LTC-12 / LTC-03] Retail rates to P-FACE 2009 rates (P-FACE 2009 was the last Group LTC product offered, but would increase by a compa
- ICC12-LTC-12 10yr and Lifetime rates are approximated by applying the ratio of [LTC-03 Lifetime (or 10yr) / LTC-03 6yr] to the ICC12-LTC-12 6yr rates (LTC-03 was the last product in which we offered 10yr or Lifetime
- An additional 3% factor was applied to account reflect differences in EP: LTC-03 has an EP where 1 day of HHC = 7 days towards EP, and ICC12-LTC-12 is a true service-day EP
- ICC12-LTC-12 unisex rates are determined by assuming a 60% female / 40% male mix of business.
- P-FACE 2009 rates were increased by an additional 9.5%, accounting for the average increase to premium rates for ICC12-LTC-12 if they were still being sold in 2016.

**Appendix A - Comparison to New Business Rates (Care Choice P-GLTC(2002-2) PA)**

Rates shown are for a 90-day EP, 75% HHC benefit, and are per \$5 monthly benefit

**Inflation Option: ABI (5% Compound Inflation)****P-GLTC(2002-2) PA Rates after Requested Rate Increases****including additional rate increase due to cost of delay :**

Issue Age	Benefit Period								
	2	3	4	5	6	7	8	10	Life
18-29	2.63	2.89	3.08	3.21	3.37	3.47	3.61	4.27	4.56
30	2.63	2.89	3.08	3.21	3.37	3.47	3.61	4.27	4.56
31	2.72	2.99	3.20	3.33	3.49	3.60	3.75	4.43	4.73
32	2.80	3.10	3.31	3.46	3.62	3.73	3.89	4.60	4.91
33	2.89	3.21	3.44	3.59	3.76	3.87	4.04	4.77	5.09
34	2.98	3.32	3.56	3.72	3.90	4.02	4.19	4.95	5.29
35	3.07	3.44	3.69	3.86	4.05	4.17	4.35	5.13	5.48
36	3.16	3.56	3.83	4.01	4.20	4.33	4.51	5.33	5.69
37	3.26	3.68	3.97	4.16	4.36	4.49	4.68	5.53	5.90
38	3.36	3.81	4.11	4.31	4.52	4.66	4.85	5.73	6.13
39	3.47	3.95	4.26	4.48	4.69	4.83	5.04	5.95	6.36
40	3.58	4.09	4.42	4.64	4.87	5.02	5.22	6.17	6.60
41	3.64	4.19	4.55	4.79	5.02	5.17	5.38	6.36	6.80
42	3.70	4.30	4.68	4.93	5.17	5.33	5.55	6.56	7.01
43	3.76	4.41	4.82	5.08	5.33	5.49	5.72	6.76	7.22
44	3.82	4.53	4.95	5.24	5.49	5.66	5.89	6.96	7.44
45	3.89	4.64	5.10	5.40	5.66	5.83	6.08	7.18	7.67
46	4.04	4.82	5.30	5.61	5.88	6.06	6.32	7.46	7.97
47	4.20	5.00	5.50	5.84	6.12	6.30	6.57	7.76	8.29
48	4.37	5.18	5.71	6.07	6.36	6.55	6.83	8.07	8.62
49	4.54	5.37	5.94	6.31	6.61	6.81	7.10	8.38	8.96
50	4.72	5.57	6.17	6.56	6.87	7.08	7.38	8.72	9.31
51	4.92	5.83	6.46	6.88	7.21	7.43	7.74	9.14	9.77
52	5.14	6.10	6.77	7.21	7.56	7.79	8.12	9.59	10.24
53	5.36	6.39	7.09	7.57	7.93	8.17	8.51	10.06	10.74
54	5.59	6.68	7.43	7.93	8.32	8.57	8.93	10.55	11.27
55	5.83	6.99	7.79	8.32	8.72	8.99	9.36	11.06	11.82
56	6.24	7.49	8.36	8.94	9.37	9.65	10.06	11.88	12.69
57	6.68	8.03	8.97	9.47	9.76	10.21	10.80	12.76	13.64
58	7.09	8.59	9.49	9.81	10.10	10.57	11.61	13.71	14.65
59	7.34	8.89	9.83	10.15	10.45	10.94	12.47	14.25	15.66
60	7.60	9.21	10.17	10.50	10.82	11.33	13.05	14.75	16.21
61	7.92	9.59	10.60	10.94	11.27	11.80	13.59	15.37	16.89
62	8.25	9.99	11.04	11.40	11.74	12.30	14.16	16.01	17.59
63	8.60	10.41	11.50	11.88	12.24	12.81	14.76	16.68	18.33
64	8.95	10.85	11.98	12.38	12.75	13.35	15.37	17.38	18.97
65	9.33	11.30	12.48	12.89	13.28	13.90	16.02	18.11	19.49
66	9.75	11.81	13.05	13.48	13.89	14.54	16.75	18.93	20.27
67	10.20	12.35	13.64	14.09	14.52	15.20	17.51	19.72	21.07
68	10.66	12.91	14.26	14.73	15.18	15.89	18.30	20.48	21.88
69	11.14	13.50	14.91	15.40	15.87	16.61	19.13	21.24	22.69
70	11.65	14.11	15.59	16.10	16.59	17.36	20.00	22.01	23.51
71	12.53	15.25	16.85	17.41	17.93	18.77	21.62	23.05	24.62
72	13.02	16.48	18.21	18.81	19.38	20.29	23.18	24.11	25.75
73	13.51	17.22	19.68	20.33	20.94	21.93	24.21	25.18	26.90
74	14.00	17.96	20.66	21.98	22.64	23.70	25.26	26.27	28.06
75	14.49	18.71	21.52	23.39	24.47	25.26	26.31	27.36	29.23
76	14.97	19.46	22.38	24.32	25.49	26.27	27.36	28.46	30.40
77	15.45	20.20	23.23	25.25	26.46	27.27	28.40	29.54	31.56
78	15.90	20.93	24.07	26.16	27.42	28.26	29.43	30.61	32.70
79	16.34	21.64	24.89	27.05	28.35	29.22	30.43	31.65	33.82
80	16.75	22.33	25.68	27.91	29.25	30.14	31.40	32.66	34.89
81	18.42	24.56	28.25	30.70	32.18	33.16	34.54	35.92	38.38
82	20.10	26.79	30.81	33.49	35.10	36.17	37.68	39.19	41.87
83	22.27	29.70	34.15	37.12	38.90	40.09	41.76	43.43	46.40
84	24.45	32.60	37.49	40.75	42.71	44.01	45.84	47.68	50.94

**P-GLTC(2002-2) PA 2016 Rate Increases (%) :**

Issue Age	Benefit Period								
	2	3	4	5	6	7	8	10	Life
18-29	16%	16%	16%	16%	16%	16%	16%	16%	16%
30	16%	16%	16%	16%	16%	16%	16%	16%	16%
31	16%	16%	16%	16%	16%	16%	16%	16%	16%
32	16%	16%	16%	16%	16%	16%	16%	16%	16%
33	16%	16%	16%	16%	16%	16%	16%	16%	16%
34	16%	16%	16%	16%	16%	16%	16%	16%	16%
35	16%	16%	16%	16%	16%	16%	16%	16%	16%
36	16%	16%	16%	16%	16%	16%	16%	16%	16%
37	16%	16%	16%	16%	16%	16%	16%	16%	16%
38	16%	16%	16%	16%	16%	16%	16%	16%	16%
39	16%	16%	16%	16%	16%	16%	16%	16%	16%
40	16%	16%	16%	16%	16%	16%	16%	16%	16%
41	16%	16%	16%	16%	16%	16%	16%	16%	16%
42	16%	16%	16%	16%	16%	16%	16%	16%	16%
43	16%	16%	16%	16%	16%	16%	16%	16%	16%
44	16%	16%	16%	16%	16%	16%	16%	16%	16%
45	16%	16%	16%	16%	16%	16%	16%	16%	16%
46	16%	16%	16%	16%	16%	16%	16%	16%	16%
47	16%	16%	16%	16%	16%	16%	16%	16%	16%
48	16%	16%	16%	16%	16%	16%	16%	16%	16%
49	16%	16%	16%	16%	16%	16%	16%	16%	16%
50	16%	16%	16%	16%	16%	16%	16%	16%	16%
51	16%	16%	16%	16%	16%	16%	16%	16%	16%
52	16%	16%	16%	16%	16%	16%	16%	16%	16%
53	16%	16%	16%	16%	16%	16%	16%	16%	16%
54	16%	16%	16%	16%	16%	16%	16%	16%	16%
55	16%	16%	16%	16%	16%	16%	16%	16%	16%
56	16%	16%	16%	16%	16%	16%	16%	16%	16%
57	16%	16%	16%	16%	16%	16%	16%	16%	16%
58	16%	16%	16%	16%	16%	16%	16%	16%	16%
59	16%	16%	16%	16%	16%	16%	16%	16%	16%
60	16%	16%	16%	16%	16%	16%	16%	16%	16%
61	16%	16%	16%	16%	16%	16%	16%	16%	16%
62	16%	16%	16%	16%	16%	16%	16%	16%	16%
63	16%	16%	16%	16%	16%	16%	16%	16%	16%
64	16%	16%	16%	16%	16%	16%	16%	16%	16%
65	16%	16%	16%	16%	16%	16%	16%	16%	16%
66	16%	16%	16%	16%	16%	16%	16%	16%	16%
67	16%	16%	16%	16%	16%	16%	16%	16%	16%
68	16%	16%	16%	16%	16%	16%	16%	16%	16%
69	16%	16%	16%	16%	16%	16%	16%	16%	16%
70	16%	16%	16%	16%	16%	16%	16%	16%	16%
71	16%	16%	16%	16%	16%	16%	16%	16%	16%
72	16%	16%	16%	16%	16%	16%	16%	16%	16%
73	16%	16%	16%	16%	16%	16%	16%	16%	16%
74	16%	16%	16%	16%	16%	16%	16%	16%	16%
75	16%	16%	16%	16%	16%	16%	16%	16%	16%
76	16%	16%	16%	16%	16%	16%	16%	16%	16%
77	16%	16%	16%	16%	16%	16%	16%	16%	16%
78	16%	16%	16%	16%	16%	16%	16%	16%	16%
79	16%	16%	16%	16%	16%	16%	16%	16%	16%
80	16%	16%	16%	16%	16%	16%	16%	16%	16%
81	16%	16%	16%	16%	16%	16%	16%	16%	16%
82	16%	16%	16%	16%	16%	16%	16%	16%	16%
83	16%	16%	16%	16%	16%	16%	16%	16%	16%
84	16%	16%	16%	16%	16%	16%	16%	16%	16%

**\* Benefit Differences between P-GLTC(2002-2) PA and P-FACE (2009):**

- The P-FACE (2009) ABI option increases the benefits and remaining LMB by 5% per year compounded. The P-FACE (2002-2) ABI option increases the DMB by 5% per year; the new LMB is calculated as the DMB times the 5% increase.
- P-FACE 2009 Group rates are approximated by applying the ratio of [ICC12-LTC-12 / LTC-03] Retail rates to P-FACE 2009 rates (P-FACE 2009 was the last Group LTC product offered, but would increase by a compa
- ICC12-LTC-12 10yr and Lifetime rates are approximated by applying the ratio of [LTC-03 Lifetime (or 10yr) / LTC-03 6yr] to the ICC12-LTC-12 6yr rates (LTC-03 was the last product in which we offered 10yr or Lifetime
- An additional 3% factor was applied to account reflect differences in EP: LTC-03 has an EP where 1 day of HHC = 7 days towards EP, and ICC12-LTC-12 is a true service-day EP
- ICC12-LTC-12 unisex rates are determined by assuming a 60% female / 40% male mix of business.
- P-FACE 2009 rates were increased by an additional 9.5%, accounting for the average increase to premium rates for ICC12-LTC-12 if they were still being sold in 2016.



**Appendix B1**  
**John Hancock Life Insurance Company (U.S.A.)**  
**P-GLTC(2002-2) PA**

*Premiums to be used only with those  
that have not previously elected an inflation decrease option*

**Rates per \$5 of Monthly Benefit - 90 Day Elimination Period**  
**Home Health Monthly Benefit at 75% of Nursing Home Monthly Benefit**

Age	FPO Base							ABI Option: (5% Compound Inflation)						
	Benefit Period							Benefit Period						
	2 Years	3 Years	4 Years	5 Years	6 Years	10 Years	Life	2 Years	3 Years	4 Years	5 Years	6 Years	10 Years	Life
18-29	0.44	0.53	0.59	0.62	0.65	0.91	1.01	2.63	2.89	3.08	3.21	3.37	4.27	4.56
30	0.44	0.53	0.59	0.62	0.65	0.91	1.01	2.63	2.89	3.08	3.21	3.37	4.27	4.56
31	0.46	0.55	0.61	0.64	0.68	0.94	1.04	2.72	2.99	3.20	3.33	3.49	4.43	4.73
32	0.47	0.58	0.64	0.67	0.70	0.98	1.08	2.80	3.10	3.31	3.46	3.62	4.60	4.91
33	0.49	0.60	0.66	0.69	0.73	1.01	1.12	2.89	3.21	3.44	3.59	3.76	4.77	5.09
34	0.51	0.62	0.68	0.72	0.75	1.05	1.16	2.98	3.32	3.56	3.72	3.90	4.95	5.29
35	0.53	0.64	0.71	0.75	0.78	1.09	1.21	3.07	3.44	3.69	3.86	4.05	5.13	5.48
36	0.55	0.66	0.73	0.77	0.81	1.13	1.25	3.16	3.56	3.83	4.01	4.20	5.33	5.69
37	0.57	0.69	0.76	0.80	0.84	1.17	1.30	3.26	3.68	3.97	4.16	4.36	5.53	5.90
38	0.59	0.71	0.79	0.83	0.87	1.21	1.35	3.36	3.81	4.11	4.31	4.52	5.73	6.13
39	0.61	0.74	0.82	0.86	0.91	1.26	1.40	3.47	3.95	4.26	4.48	4.69	5.95	6.36
40	0.63	0.77	0.85	0.89	0.94	1.31	1.45	3.58	4.09	4.42	4.64	4.87	6.17	6.60
41	0.67	0.81	0.90	0.95	0.99	1.38	1.53	3.64	4.19	4.55	4.79	5.02	6.36	6.80
42	0.71	0.86	0.95	1.00	1.05	1.46	1.62	3.70	4.30	4.68	4.93	5.17	6.56	7.01
43	0.75	0.91	1.01	1.06	1.12	1.55	1.72	3.76	4.41	4.82	5.08	5.33	6.76	7.22
44	0.80	0.97	1.07	1.12	1.18	1.64	1.82	3.82	4.53	4.95	5.24	5.49	6.96	7.44
45	0.85	1.02	1.13	1.19	1.25	1.74	1.93	3.89	4.64	5.10	5.40	5.66	7.18	7.67
46	0.90	1.09	1.20	1.27	1.33	1.85	2.05	4.04	4.82	5.30	5.61	5.88	7.46	7.97
47	0.96	1.16	1.28	1.35	1.42	1.97	2.19	4.20	5.00	5.50	5.84	6.12	7.76	8.29
48	1.02	1.24	1.37	1.44	1.51	2.10	2.33	4.37	5.18	5.71	6.07	6.36	8.07	8.62
49	1.09	1.32	1.45	1.53	1.61	2.23	2.48	4.54	5.37	5.94	6.31	6.61	8.38	8.96
50	1.16	1.40	1.55	1.63	1.71	2.38	2.64	4.72	5.57	6.17	6.56	6.87	8.72	9.31
51	1.24	1.50	1.66	1.74	1.83	2.54	2.82	4.92	5.83	6.46	6.88	7.21	9.14	9.77
52	1.32	1.60	1.77	1.86	1.96	2.72	3.02	5.14	6.10	6.77	7.21	7.56	9.59	10.24
53	1.42	1.71	1.89	1.99	2.09	2.91	3.23	5.36	6.39	7.09	7.57	7.93	10.06	10.74
54	1.51	1.83	2.03	2.13	2.24	3.11	3.45	5.59	6.68	7.43	7.93	8.32	10.55	11.27
55	1.62	1.96	2.17	2.28	2.40	3.33	3.70	5.83	6.99	7.79	8.32	8.72	11.06	11.82
56	1.74	2.11	2.33	2.45	2.57	3.58	3.97	6.24	7.49	8.36	8.94	9.37	11.88	12.69
57	1.87	2.27	2.50	2.64	2.77	3.85	4.27	6.68	8.03	8.97	9.47	9.76	12.76	13.64
58	2.01	2.44	2.69	2.83	2.97	4.14	4.59	7.09	8.59	9.49	9.81	10.10	13.71	14.65
59	2.16	2.62	2.89	3.04	3.20	4.44	4.93	7.34	8.89	9.83	10.15	10.45	14.25	15.66
60	2.32	2.81	3.11	3.27	3.44	4.78	5.30	7.60	9.21	10.17	10.50	10.82	14.75	16.21
61	2.53	3.06	3.38	3.56	3.74	5.19	5.76	7.92	9.59	10.60	10.94	11.27	15.37	16.89
62	2.75	3.33	3.67	3.87	4.06	5.65	6.27	8.25	9.99	11.04	11.40	11.74	16.01	17.59
63	2.99	3.62	3.99	4.20	4.42	6.14	6.81	8.60	10.41	11.50	11.88	12.24	16.68	18.33
64	3.25	3.93	4.34	4.57	4.80	6.67	7.41	8.95	10.85	11.98	12.38	12.75	17.38	18.97
65	3.53	4.27	4.72	4.97	5.22	7.26	8.05	9.33	11.30	12.48	12.89	13.28	18.11	19.49
66	3.85	4.66	5.15	5.42	5.69	7.91	8.78	9.75	11.81	13.05	13.48	13.89	18.93	20.27
67	4.19	5.08	5.61	5.90	6.20	8.62	9.56	10.20	12.35	13.64	14.09	14.52	19.72	21.07
68	4.57	5.53	6.11	6.43	6.76	9.39	10.42	10.66	12.91	14.26	14.73	15.18	20.48	21.88
69	4.98	6.03	6.66	7.01	7.36	10.24	11.36	11.14	13.50	14.91	15.40	15.87	21.24	22.69
70	5.43	6.57	7.26	7.64	8.03	11.16	12.38	11.65	14.11	15.59	16.10	16.59	22.01	23.51
71	6.09	7.38	8.15	8.58	9.01	12.53	13.90	12.53	15.25	16.85	17.41	17.93	23.05	24.62
72	6.84	8.28	9.15	9.63	10.11	13.89	14.84	13.02	16.48	18.21	18.81	19.38	24.11	25.75
73	7.68	9.30	10.27	10.81	11.35	14.78	15.79	13.51	17.22	19.68	20.33	20.94	25.18	26.90
74	8.37	10.44	11.53	12.14	12.75	15.70	16.77	14.00	17.96	20.66	21.98	22.64	26.27	28.06
75	8.82	11.39	12.95	13.63	14.31	16.65	17.79	14.49	18.71	21.52	23.39	24.47	27.36	29.23
76	9.28	12.06	13.87	15.07	15.80	17.64	18.84	14.97	19.46	22.38	24.32	25.49	28.46	30.40
77	9.75	12.75	14.66	15.94	16.70	18.65	19.92	15.45	20.20	23.23	25.25	26.46	29.54	31.56
78	10.22	13.45	15.47	16.82	17.62	19.68	21.02	15.90	20.93	24.07	26.16	27.42	30.61	32.70
79	10.69	14.17	16.29	17.71	18.56	20.72	22.14	16.34	21.64	24.89	27.05	28.35	31.65	33.82
80	11.16	14.89	17.12	18.61	19.50	21.77	23.26	16.75	22.33	25.68	27.91	29.25	32.66	34.89
81	12.28	16.37	18.83	20.47	21.45	23.95	25.58	18.42	24.56	28.25	30.70	32.18	35.92	38.38
82	13.40	17.86	20.54	22.33	23.40	26.12	27.91	20.10	26.79	30.81	33.49	35.10	39.19	41.87
83	14.85	19.80	22.77	24.75	25.94	28.95	30.93	22.27	29.70	34.15	37.12	38.90	43.43	46.40
84	16.30	21.73	24.99	27.17	28.47	31.78	33.96	24.45	32.60	37.49	40.75	42.71	47.68	50.94
85+	19.76	26.35	30.30	32.93	34.52	38.53	41.17	29.64	39.52	45.45	49.40	51.77	57.80	61.75

**Appendix B2**  
**John Hancock Life Insurance Company (U.S.A.)**  
**P-GLTC(2002-2) PA**

*Premiums to be used only with those  
that have previously elected an inflation decrease option*

**Rates per \$5 of Monthly Benefit - 90 Day Elimination Period**  
**Home Health Monthly Benefit at 75% of Nursing Home Monthly Benefit**

Age	ABI Option: (3.2% Compound Inflation)				
	Benefit Period				
	2 Years	3 Years	4 Years	5 Years	6 Years
18-29	1.50	1.64	1.75	1.82	1.91
30	1.50	1.64	1.75	1.82	1.91
31	1.54	1.70	1.82	1.89	1.98
32	1.59	1.76	1.88	1.96	2.06
33	1.64	1.82	1.95	2.04	2.14
34	1.69	1.89	2.02	2.11	2.22
35	1.74	1.95	2.10	2.19	2.30
36	1.80	2.02	2.17	2.28	2.39
37	1.85	2.09	2.25	2.36	2.48
38	1.91	2.17	2.34	2.45	2.57
39	1.97	2.24	2.42	2.54	2.66
40	2.03	2.32	2.51	2.64	2.76
41	2.07	2.38	2.58	2.72	2.85
42	2.10	2.44	2.66	2.80	2.94
43	2.14	2.51	2.74	2.89	3.03
44	2.17	2.57	2.81	2.98	3.12
45	2.21	2.64	2.90	3.07	3.21
46	2.30	2.74	3.01	3.19	3.34
47	2.39	2.84	3.12	3.32	3.47
48	2.48	2.94	3.25	3.45	3.61
49	2.58	3.05	3.37	3.58	3.76
50	2.68	3.17	3.50	3.73	3.90
51	2.80	3.31	3.67	3.91	4.09
52	2.92	3.47	3.85	4.10	4.29
53	3.04	3.63	4.03	4.30	4.50
54	3.17	3.79	4.22	4.51	4.72
55	3.31	3.97	4.42	4.73	4.95
56	3.54	4.26	4.75	5.08	5.32
57	3.80	4.56	5.10	5.45	5.72
58	4.07	4.89	5.47	5.86	6.14
59	4.36	5.24	5.87	6.29	6.60
60	4.67	5.61	6.30	6.76	7.09
61	4.90	5.92	6.65	7.15	7.49
62	5.15	6.24	7.03	7.55	7.91
63	5.41	6.57	7.42	7.98	8.36
64	5.68	6.93	7.83	8.43	8.84
65	5.97	7.31	8.27	8.91	9.34
66	6.33	7.78	8.84	9.54	10.00
67	6.72	8.29	9.45	10.22	10.71
68	7.13	8.84	10.10	10.94	11.46
69	7.56	9.42	10.79	11.71	12.27
70	8.03	10.03	11.54	12.54	13.14
71	8.64	10.87	12.50	13.59	14.24
72	9.30	11.77	13.54	14.72	15.42
73	10.01	12.75	14.67	15.94	16.71
74	10.77	13.82	15.89	17.27	18.10
75	11.59	14.97	17.21	18.71	19.61
76	12.48	16.21	18.65	20.27	21.24
77	13.43	17.56	20.20	21.96	23.01
78	14.46	19.03	21.88	23.78	24.93
79	15.56	20.61	23.70	25.76	27.00
80	16.75	22.33	25.68	27.91	29.25
81	18.42	24.56	28.25	30.70	32.18
82	20.10	26.79	30.81	33.49	35.10
83	22.27	29.70	34.15	37.12	38.90
84	24.45	32.60	37.49	40.75	42.71
85+	29.64	39.52	45.45	49.40	51.77

**Appendix B2**  
**John Hancock Life Insurance Company (U.S.A.)**  
**P-GLTC(2002-2) PA**

*Premiums to be used only with those  
that have previously elected an inflation decrease option*

**Rates per \$5 of Monthly Benefit - 90 Day Elimination Period**  
**Home Health Monthly Benefit at 75% of Nursing Home Monthly Benefit**

Age	ABI Option: (2.3% Compound Inflation)	
	Benefit Period	
	10 Years	Life
18-29	2.13	2.28
30	2.13	2.28
31	2.21	2.37
32	2.30	2.45
33	2.38	2.55
34	2.47	2.64
35	2.57	2.74
36	2.66	2.85
37	2.76	2.95
38	2.87	3.06
39	2.97	3.18
40	3.09	3.30
41	3.18	3.40
42	3.28	3.50
43	3.38	3.61
44	3.48	3.72
45	3.59	3.83
46	3.73	3.99
47	3.88	4.14
48	4.03	4.31
49	4.19	4.48
50	4.36	4.66
51	4.57	4.88
52	4.79	5.12
53	5.03	5.37
54	5.27	5.63
55	5.53	5.91
56	5.94	6.35
57	6.38	6.82
58	6.86	7.32
59	7.36	7.87
60	7.91	8.45
61	8.36	8.93
62	8.83	9.44
63	9.34	9.97
64	9.87	10.54
65	10.43	11.14
66	11.16	11.93
67	11.95	12.77
68	12.80	13.67
69	13.70	14.64
70	14.67	15.68
71	15.89	16.98
72	17.22	18.40
73	18.65	19.93
74	20.21	21.59
75	21.89	23.39
76	23.71	25.33
77	25.69	27.44
78	27.83	29.73
79	30.14	32.21
80	32.66	34.89
81	35.92	38.38
82	39.19	41.87
83	43.43	46.40
84	47.68	50.94
85+	57.80	61.75

**Appendix C1**  
**John Hancock Life Insurance Company (U.S.A.)**  
**P-GLTC(2002-2) PA**

*Premiums to be used only with those  
that have not previously elected an inflation decrease option*

**Rates per \$5 of Monthly Benefit - 90 Day Elimination Period**  
**Home Health Monthly Benefit at 75% of Nursing Home Monthly Benefit**

Age	ABI Option: (4.5% Compound Inflation)				
	Benefit Period				
	2 Years	3 Years	4 Years	5 Years	6 Years
18-29	2.27	2.50	2.66	2.77	2.91
30	2.27	2.50	2.66	2.77	2.91
31	2.34	2.58	2.76	2.88	3.02
32	2.42	2.67	2.86	2.99	3.13
33	2.49	2.77	2.97	3.10	3.25
34	2.57	2.87	3.07	3.21	3.37
35	2.65	2.97	3.19	3.33	3.49
36	2.73	3.07	3.30	3.46	3.63
37	2.82	3.18	3.43	3.59	3.76
38	2.90	3.29	3.55	3.72	3.90
39	2.99	3.41	3.68	3.86	4.05
40	3.09	3.53	3.82	4.01	4.20
41	3.14	3.62	3.93	4.13	4.33
42	3.19	3.71	4.04	4.26	4.46
43	3.25	3.81	4.16	4.39	4.60
44	3.30	3.91	4.28	4.52	4.74
45	3.36	4.01	4.40	4.66	4.89
46	3.49	4.16	4.57	4.85	5.08
47	3.63	4.31	4.75	5.04	5.28
48	3.77	4.47	4.93	5.24	5.49
49	3.92	4.64	5.12	5.45	5.71
50	4.08	4.81	5.32	5.66	5.93
51	4.25	5.04	5.58	5.94	6.22
52	4.43	5.27	5.84	6.23	6.53
53	4.62	5.51	6.12	6.53	6.85
54	4.82	5.77	6.42	6.85	7.18
55	5.03	6.03	6.72	7.18	7.53
56	5.39	6.47	7.22	7.72	8.09
57	5.77	6.93	7.75	8.18	8.42
58	6.12	7.42	8.20	8.47	8.72
59	6.34	7.68	8.48	8.76	9.03
60	6.56	7.95	8.78	9.07	9.34
61	6.84	8.28	9.15	9.45	9.73
62	7.12	8.63	9.53	9.84	10.14
63	7.42	8.99	9.93	10.26	10.56
64	7.73	9.36	10.34	10.69	11.01
65	8.05	9.76	10.78	11.13	11.47
66	8.42	10.20	11.27	11.64	11.99
67	8.80	10.66	11.78	12.17	12.53
68	9.20	11.15	12.31	12.72	13.10
69	9.62	11.65	12.87	13.30	13.70
70	10.06	12.18	13.46	13.90	14.32
71	10.81	13.17	14.55	15.03	15.48
72	11.24	14.23	15.72	16.24	16.73
73	11.66	14.87	16.99	17.55	18.08
74	12.09	15.51	17.83	18.97	19.54
75	12.51	16.15	18.58	20.19	21.12
76	12.93	16.80	19.32	21.00	22.01
77	13.33	17.44	20.05	21.80	22.84
78	13.73	18.07	20.78	22.59	23.67
79	14.10	18.69	21.49	23.36	24.48
80	14.46	19.28	22.17	24.10	25.25
81	15.90	21.21	24.39	26.51	27.78
82	17.35	23.13	26.60	28.92	30.30
83	19.23	25.64	29.48	32.05	33.59
84	21.11	28.15	32.37	35.18	36.87
85+	25.59	34.12	39.24	42.65	44.70

**Appendix C1**  
**John Hancock Life Insurance Company (U.S.A.)**  
**P-GLTC(2002-2) PA**

*Premiums to be used only with those  
that have not previously elected an inflation decrease option*

**Rates per \$5 of Monthly Benefit - 90 Day Elimination Period**  
**Home Health Monthly Benefit at 75% of Nursing Home Monthly Benefit**

Age	ABI Option: (4.5% Compound Inflation)	
	Benefit Period	
	10 Years	Life
18-29	3.69	3.94
30	3.69	3.94
31	3.82	4.09
32	3.97	4.24
33	4.12	4.40
34	4.27	4.56
35	4.43	4.74
36	4.60	4.91
37	4.77	5.10
38	4.95	5.29
39	5.14	5.49
40	5.33	5.69
41	5.49	5.87
42	5.66	6.05
43	5.83	6.23
44	6.01	6.42
45	6.20	6.62
46	6.44	6.88
47	6.70	7.16
48	6.96	7.44
49	7.24	7.73
50	7.53	8.04
51	7.89	8.43
52	8.28	8.84
53	8.68	9.28
54	9.11	9.73
55	9.55	10.20
56	10.26	10.96
57	11.02	11.77
58	11.84	12.65
59	12.31	13.52
60	12.74	13.99
61	13.27	14.58
62	13.83	15.19
63	14.40	15.82
64	15.01	16.38
65	15.63	16.83
66	16.35	17.50
67	17.03	18.19
68	17.68	18.89
69	18.34	19.59
70	19.00	20.30
71	19.90	21.26
72	20.81	22.24
73	21.74	23.23
74	22.68	24.23
75	23.62	25.24
76	24.57	26.25
77	25.50	27.25
78	26.43	28.23
79	27.33	29.20
80	28.19	30.12
81	31.01	33.13
82	33.83	36.15
83	37.50	40.06
84	41.16	43.98
85+	49.90	53.31

**Appendix C2**  
**John Hancock Life Insurance Company (U.S.A.)**  
**P-GLTC(2002-2) PA**

*Premiums to be used only with those  
that have previously elected an inflation decrease option*

**Rates per \$5 of Monthly Benefit - 90 Day Elimination Period**  
**Home Health Monthly Benefit at 75% of Nursing Home Monthly Benefit**

Age	ABI Option: (2.5% Compound Inflation)				
	Benefit Period				
	2 Years	3 Years	4 Years	5 Years	6 Years
18-29	1.29	1.42	1.51	1.58	1.65
30	1.29	1.42	1.51	1.58	1.65
31	1.33	1.47	1.57	1.63	1.71
32	1.37	1.52	1.63	1.70	1.78
33	1.42	1.57	1.68	1.76	1.84
34	1.46	1.63	1.75	1.83	1.91
35	1.51	1.69	1.81	1.89	1.98
36	1.55	1.74	1.88	1.97	2.06
37	1.60	1.81	1.95	2.04	2.14
38	1.65	1.87	2.02	2.12	2.22
39	1.70	1.94	2.09	2.20	2.30
40	1.75	2.00	2.17	2.28	2.39
41	1.78	2.06	2.23	2.35	2.46
42	1.81	2.11	2.30	2.42	2.54
43	1.84	2.16	2.36	2.49	2.61
44	1.88	2.22	2.43	2.57	2.69
45	1.91	2.28	2.50	2.65	2.78
46	1.98	2.36	2.60	2.75	2.89
47	2.06	2.45	2.70	2.86	3.00
48	2.14	2.54	2.80	2.98	3.12
49	2.23	2.64	2.91	3.09	3.24
50	2.32	2.73	3.02	3.22	3.37
51	2.42	2.86	3.17	3.37	3.54
52	2.52	2.99	3.32	3.54	3.71
53	2.63	3.13	3.48	3.71	3.89
54	2.74	3.28	3.65	3.89	4.08
55	2.86	3.43	3.82	4.08	4.28
56	3.06	3.67	4.10	4.38	4.59
57	3.28	3.94	4.40	4.71	4.94
58	3.51	4.22	4.72	5.06	5.30
59	3.76	4.52	5.07	5.43	5.70
60	4.03	4.85	5.44	5.84	6.12
61	4.23	5.11	5.74	6.17	6.47
62	4.45	5.38	6.07	6.52	6.83
63	4.67	5.68	6.40	6.89	7.22
64	4.91	5.98	6.76	7.28	7.63
65	5.15	6.31	7.14	7.69	8.06
66	5.47	6.72	7.63	8.24	8.63
67	5.80	7.16	8.16	8.82	9.24
68	6.16	7.63	8.72	9.44	9.90
69	6.53	8.13	9.32	10.11	10.60
70	6.93	8.66	9.96	10.83	11.35
71	7.46	9.38	10.79	11.73	12.29
72	8.03	10.16	11.69	12.71	13.32
73	8.64	11.01	12.66	13.76	14.42
74	9.30	11.93	13.72	14.91	15.63
75	10.01	12.92	14.86	16.15	16.93
76	10.77	14.00	16.10	17.50	18.34
77	11.60	15.16	17.44	18.96	19.87
78	12.48	16.43	18.89	20.53	21.52
79	13.43	17.80	20.46	22.24	23.31
80	14.46	19.28	22.17	24.10	25.25
81	15.90	21.21	24.39	26.51	27.78
82	17.35	23.13	26.60	28.92	30.30
83	19.23	25.64	29.48	32.05	33.59
84	21.11	28.15	32.37	35.18	36.87
85+	25.59	34.12	39.24	42.65	44.70

**Appendix C2**  
**John Hancock Life Insurance Company (U.S.A.)**  
**P-GLTC(2002-2) PA**

*Premiums to be used only with those  
that have previously elected an inflation decrease option*

**Rates per \$5 of Monthly Benefit - 90 Day Elimination Period**  
**Home Health Monthly Benefit at 75% of Nursing Home Monthly Benefit**

Age	ABI Option: (1.6% Compound Inflation)	
	Benefit Period	
	10 Years	Life
18-29	1.84	1.97
30	1.84	1.97
31	1.91	2.04
32	1.98	2.12
33	2.06	2.20
34	2.14	2.28
35	2.22	2.37
36	2.30	2.46
37	2.39	2.55
38	2.48	2.64
39	2.57	2.74
40	2.66	2.85
41	2.75	2.93
42	2.83	3.02
43	2.92	3.12
44	3.01	3.21
45	3.10	3.31
46	3.22	3.44
47	3.35	3.58
48	3.48	3.72
49	3.62	3.87
50	3.76	4.02
51	3.95	4.22
52	4.14	4.42
53	4.34	4.64
54	4.55	4.86
55	4.77	5.10
56	5.13	5.48
57	5.51	5.89
58	5.92	6.32
59	6.36	6.79
60	6.83	7.30
61	7.22	7.71
62	7.63	8.15
63	8.06	8.61
64	8.52	9.10
65	9.00	9.62
66	9.64	10.30
67	10.32	11.02
68	11.05	11.80
69	11.83	12.64
70	12.67	13.53
71	13.72	14.66
72	14.87	15.88
73	16.10	17.21
74	17.45	18.64
75	18.90	20.19
76	20.47	21.87
77	22.18	23.69
78	24.02	25.67
79	26.03	27.81
80	28.19	30.12
81	31.01	33.13
82	33.83	36.15
83	37.50	40.06
84	41.16	43.98
85+	49.90	53.31

**John Hancock Life Insurance Company (U.S.A.)**  
**Actuarial Memorandum for Inforce Rate Increase – Corporate Choice Policy Series**  
**January 9, 2017**

<u>Product Name</u>	<u>Form Number</u>	<u>Issue Date Range</u>
Corporate Choice	P-FACE(2004) PA	May 2007 - January 2010

**These policy form rates were originally priced with a margin for moderately adverse experience in accordance with the NAIC model rate stability regulations which were being implemented on a State by State basis during the time of our initial rate filing.**

### **1. Scope & Purpose**

This memorandum consists of materials which support the development of new premium rates for the above captioned Policy series forms. The purpose of this memorandum is to demonstrate that the requirements of this State in regards to an in force rate increase request have been met. This rate filing is not intended to be used for any other purpose.

### **2. Benefit Description**

A brief policy description for the certificate form:

#### P-FACE(2004) PA

This is a Group Long-Term Care plan that pays benefits to the certificate holder insured for the following covered care or services provided to the insured:

- Confinement in a Nursing Home or Alternate Care Facility for room, board and care services;
- Home Health Care; Hospice Care, Respite Care; or
- Attendance at an Adult Day Care Center providing Adult Day Care

It is intended to be a Qualified Long-Term Care Insurance contract under the Federal Internal Revenue Code. The benefit trigger is determined based on the insured's cognitive impairment or his requiring substantial assistance to perform two out of six activities of daily living (ADLs) of bathing, dressing, eating, toileting, transferring and maintaining continence. The insured must be certified to be chronically ill by a licensed health care practitioner.

Long-Term Care Benefits are paid at 100% of the actual charges for each day of care after the Elimination Period up to the Daily Benefit (DB) elected for care received in a Nursing Home (NH), Alternate Care Facility (ACF) or Community Based Professional Care (CBPC).

Benefits are payable until the Certificate Limit is reached. Benefits are coordinated with Medicare and other group health care plans.

### **3. Renewability**

Certificates under this policy form have a guaranteed renewable clause.



**John Hancock Life Insurance Company (U.S.A.)**  
**Actuarial Memorandum for Inforce Rate Increase – Corporate Choice Policy Series**  
**January 9, 2017**

#### **4. Applicability**

This filing is applicable to inforce policies and to new certificates enrolling in this policy series. The premium changes will apply to the base forms as well as all applicable optional benefits upon the expiration of any applicable group policy rate guarantees.

#### **5. Actuarial Assumptions**

##### Morbidity

The morbidity assumptions are derived from our own experience, following a comprehensive claim study recently completed. The study has been peer reviewed both internally as well as by an Independent third party.

Our claims projections include 12 years of future morbidity improvements at 1.1% per year, as well as a 7.5% margin for moderately adverse experience, consistent with the margin originally anticipated in our original pricing loss ratio.

Below are currently expected sample annual claim costs for a P-FACE(2004) PA policy, \$10 daily benefit, and 5yr LMB which include a 7.5% margin for moderately adverse experience:

Issue Age 45		
Age	FPO	ABI
45	4.74	6.48
50	4.79	8.11
55	6.59	13.63
60	7.36	16.76
65	12.65	35.73
70	23.49	80.98
75	63.78	277.95
80	159.28	875.91
85	339.92	2,311.69

Issue Age 50		
Age	FPO	ABI
50	5.92	7.99
55	7.46	12.44
60	8.82	16.44
65	16.99	38.99
70	36.17	101.04
75	97.18	341.82
80	232.68	1,030.51
85	426.68	2,337.98

Issue Age 60		
Age	FPO	ABI
60	8.10	9.96
65	16.30	24.71
70	38.64	69.91
75	107.47	240.25
80	263.30	733.51
85	479.90	1,642.45

**John Hancock Life Insurance Company (U.S.A.)**  
**Actuarial Memorandum for Inforce Rate Increase – Corporate Choice Policy Series**  
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Voluntary Lapses

The voluntary lapse rates are also based on our own experience:

In addition to the lapse rates shown below, we assume an additional 3.9% lapse rate due to the rate increase.

**Guaranteed Issue:**

Duration	Issue Age								
	30	40	45	50	55	60	65	70	80
1	18.7%	10.8%	8.8%	7.4%	6.8%	7.0%	7.0%	7.0%	7.0%
2	16.0%	9.4%	7.4%	5.9%	5.4%	5.4%	5.4%	5.4%	5.4%
3	12.4%	7.0%	6.5%	4.9%	4.0%	3.8%	3.8%	3.8%	3.8%
4	10.5%	6.3%	5.7%	4.3%	3.4%	3.0%	3.0%	3.0%	3.0%
5	8.9%	5.6%	5.0%	3.8%	3.0%	2.4%	2.4%	2.4%	2.4%
6	7.5%	5.0%	4.4%	3.3%	2.6%	1.9%	1.9%	1.9%	1.9%
7	6.3%	4.4%	3.8%	2.9%	2.2%	1.5%	1.5%	1.5%	1.5%
8	5.3%	3.9%	3.3%	2.5%	1.9%	1.2%	1.2%	1.2%	1.2%
9	4.8%	3.6%	3.0%	2.3%	1.7%	1.0%	1.0%	1.0%	1.0%
10	4.7%	3.3%	2.7%	2.1%	1.5%	0.8%	0.8%	0.8%	0.8%
11	4.3%	3.0%	2.4%	1.9%	1.4%	0.6%	0.6%	0.6%	0.6%
12	3.7%	2.7%	2.1%	1.6%	1.2%	0.5%	0.5%	0.5%	0.5%
13	3.3%	2.4%	1.8%	1.4%	1.0%	0.5%	0.5%	0.5%	0.5%
14	3.0%	2.2%	1.6%	1.3%	0.9%	0.5%	0.5%	0.5%	0.5%
15	2.7%	1.9%	1.4%	1.1%	0.8%	0.5%	0.5%	0.5%	0.5%
16	2.4%	1.7%	1.2%	1.0%	0.7%	0.5%	0.5%	0.5%	0.5%
17	2.2%	1.5%	1.1%	0.9%	0.6%	0.5%	0.5%	0.5%	0.5%
18	2.0%	1.4%	0.9%	0.8%	0.5%	0.5%	0.5%	0.5%	0.5%
19	1.8%	1.2%	0.8%	0.7%	0.5%	0.5%	0.5%	0.5%	0.5%
20	1.6%	1.1%	0.8%	0.7%	0.5%	0.5%	0.5%	0.5%	0.5%
21	1.4%	1.0%	0.8%	0.7%	0.5%	0.5%	0.5%	0.5%	0.5%
22	1.3%	1.0%	0.8%	0.7%	0.5%	0.5%	0.5%	0.5%	0.5%
23	1.2%	1.0%	0.8%	0.7%	0.5%	0.5%	0.5%	0.5%	0.5%
24	1.0%	1.0%	0.8%	0.7%	0.5%	0.5%	0.5%	0.5%	0.5%
25+	1.0%	1.0%	0.8%	0.7%	0.5%	0.5%	0.5%	0.5%	0.5%

**John Hancock Life Insurance Company (U.S.A.)**  
**Actuarial Memorandum for Inforce Rate Increase – Corporate Choice Policy Series**  
**January 9, 2017**

**Fully Underwritten:**

Duration	Issue Age								
	30	40	45	50	55	60	65	70	80
1	10.3%	5.8%	4.7%	3.4%	2.9%	3.0%	3.7%	3.0%	3.0%
2	8.4%	4.8%	4.0%	2.9%	2.4%	2.1%	2.4%	1.8%	1.8%
3	7.2%	4.6%	3.4%	2.8%	2.0%	1.7%	1.4%	1.4%	1.4%
4	6.2%	4.0%	2.9%	2.3%	1.7%	1.3%	1.1%	1.1%	1.1%
5	5.4%	3.5%	2.5%	2.0%	1.4%	1.1%	0.9%	1.0%	1.0%
6	4.6%	3.0%	2.2%	1.7%	1.2%	0.8%	0.7%	0.8%	0.8%
7	4.0%	2.6%	1.9%	1.4%	1.0%	0.7%	0.4%	0.7%	0.7%
8	3.4%	2.3%	1.6%	1.2%	0.9%	0.5%	0.4%	0.5%	0.5%
9	2.9%	2.0%	1.4%	1.0%	0.7%	0.4%	0.4%	0.5%	0.5%
10	2.7%	1.7%	1.3%	0.8%	0.6%	0.4%	0.4%	0.5%	0.5%
11	2.4%	1.5%	1.1%	0.8%	0.6%	0.4%	0.4%	0.5%	0.5%
12	2.3%	1.3%	0.8%	0.6%	0.5%	0.4%	0.4%	0.5%	0.5%
13	2.1%	1.2%	0.7%	0.6%	0.4%	0.4%	0.4%	0.5%	0.5%
14	2.0%	1.0%	0.6%	0.5%	0.4%	0.4%	0.4%	0.5%	0.5%
15	1.8%	0.9%	0.5%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
16	1.7%	0.8%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
17	1.6%	0.7%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
18	1.4%	0.7%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
19	1.3%	0.6%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
20	1.2%	0.6%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
21	1.1%	0.6%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
22	1.1%	0.6%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
23	1.0%	0.6%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
24	0.9%	0.6%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%
25+	0.6%	0.6%	0.4%	0.4%	0.4%	0.4%	0.4%	0.5%	0.5%

**John Hancock Life Insurance Company (U.S.A.)**  
**Actuarial Memorandum for Inforce Rate Increase – Corporate Choice Policy Series**  
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**Mortality**

The mortality rates have also been derived based on our own experience within our retail and group long-term care block of business.

The base mortality table is the unloaded 1994 Group Annuity Mortality Table, sex-distinct, with 19 years of historical improvements based on scale AA. We then apply the following series of adjustment factors which vary by underwriting class and gender:

**Fully Underwritten:**

<b>Policy Duration</b>	<b>Issue Age</b>			
	<b>&lt; = 55</b>	<b>65</b>	<b>75</b>	<b>&gt; = 82</b>
1	33.3%	19.0%	19.0%	28.5%
2	36.1%	21.9%	25.7%	33.3%
3	39.0%	24.7%	32.3%	38.0%
4	40.9%	27.6%	39.0%	42.8%
5	42.8%	31.4%	45.6%	47.5%
6	44.7%	36.1%	52.3%	52.3%
7	46.6%	41.8%	55.1%	57.0%
8	48.5%	48.5%	58.0%	61.8%
9	50.4%	55.1%	60.8%	66.5%
10	51.3%	61.8%	63.7%	71.3%
11	52.3%	64.6%	69.4%	76.0%
12	53.6%	66.5%	75.1%	80.8%
13	54.9%	67.5%	77.9%	85.5%
14	56.2%	68.5%	80.8%	90.3%
15	57.4%	69.7%	83.6%	95.0%
16	58.7%	71.1%	85.5%	95.0%
17	60.0%	72.5%	86.9%	95.0%
18	61.3%	74.0%	88.5%	95.0%
19	62.6%	75.4%	90.1%	95.0%
20	63.9%	76.9%	92.2%	95.0%
21	65.6%	78.4%	95.0%	95.0%
22	67.5%	80.1%	95.0%	95.0%
23	69.4%	81.7%	95.0%	95.0%
24	72.2%	83.4%	95.0%	95.0%
25	76.0%	85.1%	95.0%	95.0%
26	79.8%	86.7%	95.0%	95.0%
27	83.6%	88.4%	95.0%	95.0%
28	87.4%	90.0%	95.0%	95.0%
29	91.2%	91.7%	95.0%	95.0%
30+	95.0%	95.0%	95.0%	95.0%

**John Hancock Life Insurance Company (U.S.A.)**  
**Actuarial Memorandum for Inforce Rate Increase – Corporate Choice Policy Series**  
**January 9, 2017**

**Guaranteed Issue Male:**

<b>Policy Duration</b>	<b>Issue Age</b>				
	<b>&lt; = 45</b>	<b>55</b>	<b>65</b>	<b>75</b>	<b>&gt; = 84</b>
1	133.0%	76.0%	52.3%	65.6%	95.0%
2	129.2%	75.1%	53.2%	67.5%	95.0%
3	125.4%	74.1%	54.2%	70.3%	95.0%
4	121.6%	73.2%	55.1%	73.2%	95.0%
5	117.8%	72.2%	57.0%	76.0%	95.0%
6	115.0%	70.3%	58.9%	79.8%	95.0%
7	112.1%	68.4%	60.8%	83.6%	95.0%
8	109.3%	64.6%	61.8%	87.4%	95.0%
9	106.4%	60.8%	62.7%	91.2%	95.0%
10	103.6%	57.0%	63.7%	95.0%	95.0%
11	100.7%	53.2%	65.6%	95.0%	95.0%
12	98.8%	54.2%	67.5%	95.0%	95.0%
13	96.9%	55.1%	70.3%	95.0%	95.0%
14	95.0%	57.0%	73.2%	95.0%	95.0%
15	91.2%	58.0%	76.0%	95.0%	95.0%
16	88.8%	59.5%	80.6%	96.0%	96.0%
17	86.8%	62.1%	85.4%	97.0%	97.0%
18	85.2%	63.7%	90.2%	98.0%	98.0%
19	83.9%	65.3%	95.0%	99.0%	99.0%
20	82.8%	67.0%	100.0%	100.0%	100.0%
21	81.3%	69.0%	100.0%	100.0%	100.0%
22	80.0%	71.0%	100.0%	100.0%	100.0%
23	79.1%	74.0%	100.0%	100.0%	100.0%
24	78.6%	77.0%	100.0%	100.0%	100.0%
25	84.0%	80.0%	100.0%	100.0%	100.0%
26	88.0%	84.0%	100.0%	100.0%	100.0%
27	92.0%	88.0%	100.0%	100.0%	100.0%
28	96.0%	92.0%	100.0%	100.0%	100.0%
29	98.0%	96.0%	100.0%	100.0%	100.0%
30+	100.0%	100.0%	100.0%	100.0%	100.0%

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**Guaranteed Issue Female:**

Policy Duration	Issue Age				
	< = 45	55	65	75	> = 84
1	154.0%	88.0%	60.5%	75.9%	110.0%
2	149.6%	86.9%	61.6%	78.1%	110.0%
3	145.2%	85.8%	62.7%	81.4%	110.0%
4	140.8%	84.7%	63.8%	84.7%	110.0%
5	136.4%	83.6%	66.0%	88.0%	110.0%
6	133.1%	81.4%	68.2%	92.4%	110.0%
7	129.8%	79.2%	70.4%	96.8%	110.0%
8	126.5%	74.8%	71.5%	101.2%	110.0%
9	123.2%	70.4%	72.6%	105.6%	110.0%
10	119.9%	66.0%	73.7%	110.0%	110.0%
11	116.6%	61.6%	75.9%	110.0%	110.0%
12	114.4%	62.7%	78.1%	110.0%	110.0%
13	112.2%	63.8%	81.4%	110.0%	110.0%
14	110.0%	66.0%	84.7%	110.0%	110.0%
15	105.6%	67.1%	88.0%	110.0%	110.0%
16	99.9%	67.0%	90.7%	108.0%	108.0%
17	94.8%	67.8%	93.3%	106.0%	106.0%
18	90.4%	67.6%	95.7%	104.0%	104.0%
19	86.4%	67.3%	97.9%	102.0%	102.0%
20	82.8%	67.0%	100.0%	100.0%	100.0%
21	81.3%	69.0%	100.0%	100.0%	100.0%
22	80.0%	71.0%	100.0%	100.0%	100.0%
23	79.1%	74.0%	100.0%	100.0%	100.0%
24	78.6%	77.0%	100.0%	100.0%	100.0%
25	84.0%	80.0%	100.0%	100.0%	100.0%
26	88.0%	84.0%	100.0%	100.0%	100.0%
27	92.0%	88.0%	100.0%	100.0%	100.0%
28	96.0%	92.0%	100.0%	100.0%	100.0%
29	98.0%	96.0%	100.0%	100.0%	100.0%
30+	100.0%	100.0%	100.0%	100.0%	100.0%

Factors for ages not listed above are interpolated.

We are also projecting 12 years of future mortality improvement based on scale AA, consistent with the 12 years of future morbidity improvement in our future claim projections.

Expenses

Expenses have not been explicitly projected. It is assumed that the originally filed expense assumptions remain appropriate.

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**6. Trend Assumptions**

As this is not medical insurance, we have not included any explicit medical cost trends in the projections.

**7. Marketing Method**

The employees and other eligibles were marketed through the Employer, Union or Association as part of their corporate sponsored employee benefits package with the support of John Hancock representatives and direct mail.

**8. Underwriting**

Actively at Work employees were generally offered coverage on a Guaranteed Acceptance basis during limited enrollment periods. Other eligibles were underwritten using either simplified (short form) or full underwriting.

**9. Premium Classes**

The base policy premium rates vary by Issue age, LMB, and Inflation Option, as in the initial rate filing.

All premium factors related to the insured elected benefit design options, case size, commissions, or underwriting risk class remain unchanged from the initial rate filing

**10. Premium Modalization Rules**

Premiums are payable through payroll deduction, direct bill, automatic bank withdrawal or credit cards on a monthly basis.

The following factors are applied to the monthly premium for different billing frequencies.

<b>Frequency</b>	<b>Multiple of Monthly Premium</b>
Monthly	1
Quarterly	3
Semi-annual	6
Annual	12

**11. Issue Age Range**

The issue age range is 18+ for all policy forms.

**12. Area Factors**

Area factors are not applicable to any of the policy forms or optional benefits.

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### 13. Average Annual Premium

The table below summarizes the average annual premium per certificate before and after the requested increase.

Form	Nationwide	Pennsylvania	
	before the rate increase	before the rate increase	after the rate increase
P-FACE(2004) PA	1,260	1,500	1,927

### 14. Number of Certificate Holders

The table below summarizes, as of 12/31/2015, the number of certificates inforce and their 2015 annualized premium that will be affected by this rate increase in your state.

Form	Number of Certificates	2015 Annualized Premium
P-FACE(2004) PA	1,254	1,881,964

### 15. Reserves

Active Life Reserves have not been used in this rate increase demonstration. Minimum Statutory Claim reserves as of 12/31/2015 have been discounted to the date of incurral of each respective claim and included in the historical incurred claims. Incurred But Not Reported claim reserves as of 12/31/2015 have also been allocated to the calendar year of incurral and included in historic incurred claims.

### 16. Requested Rate Increase

The Company is requesting an average rate increase of 28.4%. Rate increases were derived as follows:

1. The Company first determined the projected lifetime loss ratio for this form based on nationwide actual experience and projected future experience assuming all prior rate increase requests were approved in full and within three months of the original filing date. We then determined the amount of rate increase (28.4%) that would be needed in order to revert to the lifetime loss ratio certified to in our 2010 inforce rate increase filing for this form.
2. We are no longer selling new business under this policy form, but we ensured that the proposed rate increases did not result in premium rates that exceed what could be reasonably estimated as new business rates for our Group forms. We determined such rates by applying a series of factors to the P-FACE(2009) policy form premium rates (which were the last set of Group LTC premium rates that were sold). One factor applied to P-FACE(2009) premium rates was a ratio of the most recent Traditional Retail premium rates filed in the Interstate Compact prior to Performance LTC (ICC12-LTC-12, filed in 2014) relative to the Retail LTC rates filed in 2010 (LTC-03). This was done because we believe that if new business for Group Long-Term Care was still being sold, premium rates would have increased by a comparable amount to our Retail business since 2010. Rates were increased by an additional 9.5% across the board, accounting for the average increase to premium rates for ICC12-LTC-12 if they were still being sold in 2016 since a 2016 experience study showed a need to raise rates by 9.5%. There is no impact to our proposed rate increase since our proposed premium rates fall below our assumed new business rates. These rates were then further adjusted for benefit differences and changes in underwriting guidelines and risk classification (this is demonstrated in **Appendix A**). After the application of this restriction the average rate increase for the forms listed in this memo is 28.4%.



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3. We ensured that the resulting overall increase in rates satisfied the rate stability rule ensuring no less than an 85% loss ratio on the rate increase portion, while applying the original loss ratio on the original rate schedule (as the original loss ratio was higher than 58%). This is demonstrated at the bottom of **Exhibit 1** where it can be seen that the sum of past and future projected incurred claims is not less than the sum of the original premium times the original loss ratio and the rate increase premium times the 85% loss ratio requirement.

**Appendix B1** contains the new proposed rate tables for all policy forms included with this filing for those certificate holders that *did not* elect an inflation reduction option as part of the 2010 rate increase filings.

**Appendix B2** contains the new proposed rate tables for all policy forms included with this filing for those certificate holders that *did* elect an inflation reduction option as part of the 2010 rate increase filings. Please note that the actual rates implemented may vary slightly from those in Appendices B1 and B2 due to implementation rounding algorithms.

## **17. Analysis Performed**

The initial premium schedule was based on the originally filed pricing assumptions which were believed to be appropriate, given company and industry experience available, when the initial rate schedule was developed.

The original pricing assumptions for morbidity, voluntary termination rates, and mortality were as follows:

### Morbidity

Claim cost assumptions are derived primarily from our own experience. For advanced ages, where we do not have credible amounts of exposure, our data was extrapolated using the patterns found in the 1985 National Center for Health Statistics National Nursing Home Survey. The claim costs are adjusted for the impact of underwriting and anti-selection considerations.

Below are the original sample annual claim costs for a P-FACE(2004) policy, \$10 daily benefit, and 5yr LMB which include a 7.5% margin for moderately adverse experience:

Issue Age 45		
Age	FPO	ABI
45	1.84	2.20
50	2.46	3.72
55	4.12	7.88
60	8.01	18.36
65	16.73	43.87
70	21.79	73.82
75	55.53	239.18
80	129.35	708.89
85	234.73	1,597.45
90	320.48	2,666.41

Issue Age 50		
Age	FPO	ABI
50	2.58	3.10
55	3.61	5.49
60	7.04	13.39
65	15.58	34.44
70	21.87	58.42
75	56.09	189.81
80	131.67	566.05
85	241.15	1,286.98
90	331.61	2,160.62

Issue Age 60		
Age	FPO	ABI
60	4.18	5.05
65	11.36	17.90
70	21.19	36.26
75	55.30	117.24
80	131.18	348.79
85	241.51	792.35
90	332.91	1,330.10

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Voluntary Terminations

The initial premium schedule was based on the originally filed pricing assumptions which were believed to be appropriate, given company and industry experience available, when the initial rate schedule was developed.

**FPO:**

Duration	30	40	45	50	55	60	65	70	80
1	10.00%	8.30%	6.50%	6.50%	6.50%	6.80%	2.70%	2.70%	2.70%
2	8.00%	6.80%	5.50%	5.30%	5.00%	4.50%	2.20%	2.20%	2.20%
3	7.00%	6.00%	5.00%	4.80%	4.50%	4.00%	2.00%	2.00%	2.00%
4	6.00%	5.00%	4.00%	3.50%	3.00%	2.80%	1.70%	1.70%	1.70%
5	5.00%	4.40%	3.80%	3.10%	2.50%	2.20%	1.60%	1.60%	1.60%
6	4.50%	4.00%	3.50%	2.90%	2.30%	1.90%	1.60%	1.60%	1.60%
7	4.00%	3.60%	3.30%	2.60%	2.00%	1.70%	1.50%	1.50%	1.50%
8	3.50%	3.10%	2.80%	2.10%	1.50%	1.50%	1.50%	1.50%	1.50%
9	3.00%	2.50%	2.00%	1.60%	1.50%	1.50%	1.50%	1.50%	1.50%
10	2.50%	2.00%	1.50%	1.40%	1.40%	1.40%	1.40%	1.40%	1.40%
11	1.40%	1.40%	1.40%	1.40%	1.40%	1.40%	1.40%	1.40%	1.40%
12	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%
13	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%
14+	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%	1.20%

**ABI:**

Duration	30	40	45	50	55	60	65	70	80
1	10.00%	8.30%	6.50%	6.50%	6.50%	6.80%	2.70%	2.70%	2.70%
2	8.00%	6.80%	5.50%	5.30%	5.00%	4.50%	2.15%	2.15%	2.15%
3	7.00%	6.00%	5.00%	4.80%	4.50%	4.00%	1.95%	1.95%	1.95%
4	6.00%	5.00%	4.00%	3.50%	3.00%	2.80%	1.60%	1.60%	1.60%
5	5.00%	4.40%	3.80%	3.10%	2.50%	2.20%	1.50%	1.50%	1.50%
6	4.50%	4.00%	3.50%	2.90%	2.30%	1.90%	1.40%	1.40%	1.40%
7	4.00%	3.60%	3.30%	2.60%	2.00%	1.70%	1.30%	1.30%	1.30%
8	3.50%	3.10%	2.80%	2.10%	1.50%	1.50%	1.20%	1.20%	1.20%
9	3.00%	2.50%	2.00%	1.60%	1.50%	1.50%	1.10%	1.10%	1.10%
10	2.50%	2.00%	1.50%	1.40%	1.40%	1.40%	1.00%	1.00%	1.00%
11+	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%	0.90%

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Mortality

The 1994 Group Annuity Mortality Table was used, weighted 45% males and 55% females, with the following selection factors applied:

Duration	Selection Factor
1	20.00%
2	30.00%
3	40.00%
4	50.00%
5	60.00%
6	65.00%
7	70.00%
8	75.00%
9	80.00%
10	85.00%
11	90.00%
12	95.00%
13+	97.00%

In addition, future improvements were reflected based on scale AA.

**The following tables show in aggregate how our new assumptions (excluding the moderately adverse margin) compare to actual experience:**

Morbidity

Experience period: Inception through 9/30/2012 for incidence, inception through 9/30/2011 for claim terminations and salvage

The following charts show key experience compared to revised assumptions.

**Incidence**

Duration	A/E
1-3	114%
4-6	106%
7-9	99%
10+	100%
<b>Total</b>	<b>102%</b>

**Claim Terminations**

Continuance	A/E
<b>Total</b>	<b>99%</b>

**Salvage**

Amount Paid	A/E
<b>Total</b>	<b>103%</b>

While we usually complete triennial studies, we found that our quarterly morbidity A/E from Q3-2013 to Q2-2015 (the point at which we would have started the next study) averaged 100%. Therefore, we are still comfortable with the assumptions set based on 2012 data.

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Voluntary Lapses

Experience period: 4/1/2009-3/31/2012

	A/E by Amount	
Duration	UW	GI
1	73%	100%
2	72%	101%
3-5	84%	97%
6-10	93%	103%
11+	100%	100%
<b>Total</b>	<b>85%</b>	<b>100%</b>

We increased ultimate lapse rates slightly (in the range of 0.1% to 0.2%), consistent with experience, which slightly lowered the loss ratio.

Note that we are no longer selling Group business. Early durations are no longer applicable.

Mortality

Experience period: 4/1/2009-3/31/2012

	A/E by Amount	
Duration	UW	GI
1-5	118%	105%
6-10	105%	104%
11-15	92%	101%
16+	98%	94%
<b>Total</b>	<b>100%</b>	<b>101%</b>

While we usually complete triennial studies, we found that our quarterly termination A/E from Q3-2013 to Q2-2015 (the point at which we would have started the next study) averaged 99%. Therefore, we are still comfortable with the assumptions set based on 2012 data.

## **18. Experience – Past & Future**

**Exhibit 1** contains nationwide past premium and claims experience and future premium and claim projections and illustrates that the anticipated lifetime loss ratio with the requested rate increase is 98.9%, well in excess of the minimum loss ratio of 60% as well as greater than the original pricing loss ratio of 93.6%. The lifetime loss ratio as of 12/31/2015 is calculated as the sum of accumulated past and discounted future claims divided by the sum of accumulated past and discounted future earned premium where accumulation and discounting occur at the maximum statutory valuation discount rate. In Exhibit 1, the proposed rate increase is applied historically (starting in calendar year 2012). Please refer to the cover letter for background on this modeling assumption.

In addition, **Exhibit 1** contains the original expected loss ratio projections, adjusted for the actual mix of business issued, with the lifetime loss ratio also calculated as stated above.

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Furthermore, **Exhibit 1** demonstrates that the sum of the accumulated value of incurred claims without the inclusion of active life reserves, and the present value of future projected incurred claims, without the inclusion of active life reserves, will not be less than the sum of the following:

1. Accumulated value of the initial earned premium times the original assumed lifetime loss ratio (which was higher than 58%),
2. 85% of the accumulated value of prior premium rate schedule increases,
3. Present value of future projected initial earned premium times the original assumed lifetime loss ratio, and
4. 85% of the present value of future projected premium in excess of the projected initial earned premium.

Note that rate increases will only apply once the applicable group policy rate guarantee has expired.

#### **19. New inflation options that will allow certificate holders to avoid the rate increase**

Although this is a closed block of business, we are filing new future inflation options that will allow certificate holders that have a fixed Compound Inflation (Automatic Benefit Increase or ABI) coverage the option to completely avoid the rate increase.

Under these new options, the certificate holders get to keep their current accumulated Daily benefit and their current remaining Lifetime Maximum Benefit, but the future indexation rate will be reduced as follows:

- For certificate holders that are currently receiving a 5% inflation benefit, the annual inflation rate will be reduced from 5% to a future annual rate of 4.2%
- For certificate holders that have previously reduced their inflation rate in order to avoid a rate increase and are currently receiving an inflation benefit of 4.5%, the future annual inflation rate will be reduced to 3.8%.

Both the 4.2% and 3.8% indexation rates were determined to be actuarially equivalent to the requested rate increases in aggregate and therefore these options are only available if the full rate increase requested is accepted.

The premium rate schedules for these options are included in this filing as **Appendices C1 and C2**.

#### **20. History of Previous Rate Revisions**

A 22.5% rate increase on these policy forms was accepted by your state on February 17, 2011.

#### **21. Ensuring No Cross-Subsidization Between States**

We have ensured no state's rate increase approvals will subsidize other states' experience. Rate increases will vary by state, but only to reflect the timing and amount of prior rate increases approved by that state. This is accomplished by first backing-out all prior rate increases from our nationwide premium data. We then re-introduce prior rate increases with the amount and timing based on your state's prior approvals (as detailed in Section 20). The current proposed rate increases are then determined based on the amounts needed in order to achieve our target loss ratios where our targets reflect the lifetime loss ratios certified to in our prior filing.

Although some states may have capped our previous inforce rate increase filings, in each case this was done with the understanding that the full amount of the proposed rate increases were justified and that John Hancock would be re-filing for the remainder at a later date. In instances where the remainder remains unapproved, it has been included in the current filings.

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**22. Past Losses Testing**

Preventing companies from recouping past losses was the subject of a recent discussion by the NAIC in late 2013. The accepted methodology, which was incorporated into the 2014 LTC Model Regulation, defines past losses as actual past claims less expected past claims when determining loss ratio compliance where expected past claims are defined as the following:

Expected claims shall be calculated based on the original filing assumptions assumed until new assumptions are filed as part of a rate increase. New assumptions shall be used for all periods beyond each requested effective date of a rate increase regardless of whether or not the rate increase is approved. Expected claims are calculated for each calendar year based on the in-force during the calendar year. Expected claims shall include margins for moderately adverse experience; the margins included in the claims that were used to determine the lifetime loss ratio consistent with the original filing or as modified in any rate increase filing.

We apply this methodology in **Exhibit 1A**. The ‘Adjusted Expected Incurred Claims’ are initially calculated by applying the original pricing loss ratio to the actual earned premium in a given calendar year. Later, in years in which we filed for inforce rate increases, expected incurred claims are based on the new assumptions that were filed at that time.

**23. Proposed Effective Date**

These rates will not be effective until after we have satisfied the required 60 days advance notice to the policyholder and to the insureds.

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**24. Actuarial Certification**

I am a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries, and I meet the Academy's qualification standards for rendering this opinion and am familiar with the requirements for filing long-term care insurance premiums and filing for increases in long-term care insurance premiums. This memorandum has been prepared in conformity with all applicable Actuarial Standards of Practice, including ASOP No. 8.

The preceding Actuarial Memorandum contains:

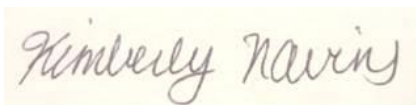
- a) the assumptions on which this certification is based;
- b) the adjustments to prior assumptions with an explanation of the reasons previous assumptions were not realized;
- c) a lifetime projection of the prior premium rate schedules and incurred claims plus future expected premiums and claims which demonstrates that the revised premium rate schedule meets the loss ratios standards and necessary details of this state; and
- d) disclosure of the manner, if any, in which reserves have been recognized.

If the requested premium rate schedule increase is implemented and the underlying assumptions which reflect moderately adverse conditions are realized, no further premium rate schedule increases are anticipated.

I have reviewed and taken into consideration the policy design and coverage provided, and our current underwriting and claims adjudication processes.

In forming my opinion, I have used actuarial assumptions and actuarial methods and such tests of the actuarial calculations as I considered necessary. Based on these assumptions or statutory requirements where necessary, the premium rate filing is in compliance with the loss ratio standards of this state.

The basis for contract reserves has been previously filed and there is no anticipation of any changes.



Kimberly Navins, FSA, MAAA  
Actuary  
John Hancock Life Insurance Company (U.S.A.)

**Exhibit 1: Nationwide Loss Ratio Exhibit  
Coporate Choice (P-FACE(2004) PA)**

		Original Assumptions			Historical & Projected Experience					
					Before Proposed Increase			With Proposed Rate Increase		
	Calendar Year	Incurred Claims	Earned Premium	Incurred Loss Ratio	Incurred Claims	Earned Premium	Incurred Loss Ratio	Incurred Claims	Earned Premium	Incurred Loss Ratio
Historical Experience	2006	9,245	176,935	5%	-	181,250	0%	-	181,250	0%
	2007	77,000	1,660,238	5%	541	1,637,081	0%	541	1,637,081	0%
	2008	190,318	4,310,756	4%	21,167	4,204,035	1%	21,167	4,204,035	1%
	2009	304,312	6,556,277	5%	79,590	6,275,661	1%	79,590	6,275,661	1%
	2010	434,774	8,172,359	5%	581,997	7,611,263	8%	581,997	7,611,263	8%
	2011	516,585	8,456,948	6%	280,795	7,819,975	4%	280,795	7,819,975	4%
	2012	609,940	8,308,873	7%	648,390	7,943,670	8%	648,390	8,344,263	8%
	2013	712,132	8,044,311	9%	54,598	7,406,075	1%	54,598	7,801,235	1%
	2014	840,914	7,816,735	11%	447,586	7,485,407	6%	447,586	8,068,872	6%
	2015	975,770	7,604,526	13%	487,834	7,447,850	7%	487,834	9,485,886	5%
Projected Future Experience	2016	1,115,396	7,399,146	15%	1,201,761	7,295,461	16%	1,203,200	9,370,620	13%
	2017	1,275,227	7,187,807	18%	1,372,257	7,105,529	19%	1,359,951	9,009,203	15%
	2018	1,464,284	6,997,597	21%	1,560,369	6,885,036	23%	1,508,828	8,502,006	18%
	2019	1,701,321	6,823,349	25%	1,784,368	6,610,463	27%	1,727,451	8,162,949	21%
	2020	1,951,835	6,658,187	29%	2,047,194	6,384,621	32%	1,983,324	7,884,067	25%
	2021	2,214,527	6,495,283	34%	2,354,619	6,176,736	38%	2,281,994	7,627,359	30%
	2022	2,522,207	6,330,772	40%	2,724,520	6,024,299	45%	2,640,745	7,439,122	35%
	2023	2,877,540	6,162,566	47%	3,156,181	5,895,448	54%	3,058,964	7,280,010	42%
	2024	3,298,566	5,989,954	55%	3,640,222	5,766,369	63%	3,527,674	7,120,617	50%
	2025	3,728,705	5,812,442	64%	4,186,313	5,635,539	74%	4,056,175	6,959,060	58%
	2026	4,167,168	5,629,929	74%	4,817,075	5,501,383	88%	4,666,243	6,793,398	69%
	2027	4,671,502	5,442,215	86%	5,541,004	5,362,182	103%	5,366,083	6,621,505	81%
	2028	5,238,420	5,249,237	100%	6,369,595	5,216,393	122%	6,166,795	6,441,477	96%
	2029	5,860,451	5,051,108	116%	7,283,676	5,062,356	144%	7,049,966	6,251,265	113%
	2030	6,517,378	4,848,244	134%	8,257,923	4,899,004	169%	7,991,112	6,049,549	132%
	2031	7,191,026	4,641,231	155%	9,293,596	4,725,920	197%	8,991,316	5,835,816	154%
	2032	7,836,383	4,430,694	177%	10,368,236	4,542,975	228%	10,028,877	5,609,906	179%
	2033	8,438,095	4,217,304	200%	11,470,432	4,348,164	264%	11,092,708	5,369,342	207%
	2034	9,030,590	4,001,905	226%	12,545,463	4,144,046	303%	12,130,044	5,117,287	237%
	2035	9,611,879	3,785,501	254%	13,587,205	3,932,442	346%	13,134,771	4,855,987	270%
	2036	10,201,985	3,569,177	286%	14,571,310	3,712,603	392%	14,083,378	4,584,518	307%
	2037	10,789,752	3,353,992	322%	15,501,910	3,486,413	445%	14,979,783	4,305,207	348%
	2038	11,348,717	3,140,989	361%	16,273,670	3,257,553	500%	15,722,708	4,022,599	391%
	2039	11,856,768	2,931,227	404%	16,937,688	3,027,684	559%	16,361,204	3,738,744	438%
	2040	12,309,438	2,725,773	452%	17,486,641	2,799,495	625%	16,888,206	3,456,964	489%
	2041	12,675,302	2,525,686	502%	17,872,243	2,576,397	694%	17,257,415	3,181,471	542%
	2042	12,917,143	2,331,901	554%	18,109,150	2,359,406	768%	17,482,959	2,913,519	600%
	2043	13,053,922	2,145,210	609%	18,156,856	2,150,122	844%	17,525,996	2,655,084	660%
	2044	13,165,542	1,966,335	670%	18,062,836	1,949,889	926%	17,432,278	2,407,826	724%
	2045	13,253,968	1,795,966	738%	17,871,759	1,759,753	1016%	17,244,864	2,173,036	794%
	2046	13,283,596	1,634,748	813%	17,650,177	1,580,541	1117%	17,027,854	1,951,735	872%
	2047	13,262,970	1,483,120	894%	17,310,222	1,412,773	1225%	16,696,871	1,744,567	957%
	2048	13,180,190	1,341,156	983%	16,884,993	1,256,794	1343%	16,283,887	1,551,955	1049%
	2049	13,025,450	1,208,654	1078%	16,360,212	1,112,872	1470%	15,775,273	1,374,233	1148%
	2050	12,811,416	1,085,302	1180%	15,718,880	980,976	1602%	15,154,700	1,211,361	1251%
	2051	12,553,959	970,793	1293%	15,015,841	860,767	1744%	14,474,883	1,062,920	1362%
	2052	12,289,895	864,844	1421%	14,227,871	751,851	1892%	13,713,508	928,426	1477%
	2053	12,053,392	767,180	1571%	13,515,330	653,822	2067%	13,024,830	807,374	1613%
	2054	11,840,782	677,540	1748%	12,849,587	566,137	2270%	12,381,398	699,095	1771%
	2055	11,588,655	595,633	1946%	12,197,052	488,100	2499%	11,750,949	602,732	1950%
	2056	11,246,870	521,142	2158%	11,484,212	418,991	2741%	11,062,784	517,392	2138%
	2057	10,819,424	453,724	2385%	10,767,716	358,144	3007%	10,371,337	442,256	2345%
	2058	10,324,334	392,956	2627%	10,043,743	304,903	3294%	9,672,933	376,511	2569%
<b>Values as of 12/31/2015 (discounted at maximum statutory valuation rates)</b>										
	Past :	5,296,860	71,498,240	7.4%	2,965,191	67,876,649	4.4%	2,965,191	71,469,274	4.1%
	Future :	150,943,882	95,348,636	158.3%	189,246,136	93,747,754	201.9%	182,854,076	116,340,948	157.2%
	Lifetime :	156,240,741	166,846,876	93.6%	192,211,326	161,624,403	118.9%	185,819,267	187,810,222	98.9%

**Total Incurred Claims exceed Total Initial Premiums x max(58%, Original Pricing Loss Ratio) + Increased Premiums x max(85%, Original Pricing Loss Ratio)**

Accum. Value of Past Incurred Claims =	2,965,191		Accum Value of Past Initial Prm x 93.6% =	59,561,038
Present Value of Future Incurred Claims =	182,854,076		Present Value of Future Initial Prm x 93.6% =	69,240,355
Total =	185,819,267	>=	Accum Value of Prior Increases x 93.6% =	7,365,072
			Present Value of Future Increases x 93.6% =	39,705,023
			Total =	175,871,487



**Exhibit 1A: Pass Losses Exhibit  
Coporate Choice (P-FACE(2004) PA)**

Calendar Year	Loss Ratios to Apply to Actual Premium			Adjusted Expected Incurred Claims	Before Proposed Increase			With Proposed Rate Increase			
	Incurred Claims	Earned Premium	Incurred Loss Ratio*		Incurred Claims	Earned Premium	Incurred Loss Ratio*	Incurred Claims	Earned Premium	Incurred Loss Ratio*	
Original Pricing	2006	9,245	176,935	5%	9,471	0	181,250	0%	0	181,250	0%
	2007	77,000	1,660,238	5%	75,926	541	1,637,081	0%	541	1,637,081	0%
	2008	190,318	4,310,756	4%	185,607	21,167	4,204,035	1%	21,167	4,204,035	1%
	2009	304,312	6,556,277	5%	291,287	79,590	6,275,661	1%	79,590	6,275,661	1%
2010 RI	2010	627,394	7,151,453	9%	667,733	581,997	7,611,263	8%	581,997	7,611,263	8%
	2011	644,703	6,782,445	10%	743,325	280,795	7,819,975	4%	280,795	7,819,975	4%
	2012	690,452	7,323,890	9%	748,881	648,390	7,943,670	8%	648,390	8,344,263	8%
	2013	750,721	7,071,312	11%	786,261	54,598	7,406,075	1%	54,598	7,801,235	1%
	2014	828,623	7,184,750	12%	863,298	447,586	7,485,407	6%	447,586	8,068,872	6%
	2015	926,707	7,177,603	13%	961,599	487,834	7,447,850	7%	487,834	9,485,886	5%
Projected Future Experience	2016					1,201,761	7,295,461	16%	1,203,200	9,370,620	13%
	2017					1,372,257	7,105,529	19%	1,359,951	9,009,203	15%
	2018					1,560,369	6,885,036	23%	1,508,828	8,502,006	18%
	2019					1,784,368	6,610,463	27%	1,727,451	8,162,949	21%
	2020					2,047,194	6,384,621	32%	1,983,324	7,884,067	25%
	2021					2,354,619	6,176,736	38%	2,281,994	7,627,359	30%
	2022					2,724,520	6,024,299	45%	2,640,745	7,439,122	35%
	2023					3,156,181	5,895,448	54%	3,058,964	7,280,010	42%
	2024					3,640,222	5,766,369	63%	3,527,674	7,120,617	50%
	2025					4,186,313	5,635,539	74%	4,056,175	6,959,060	58%
	2026					4,817,075	5,501,383	88%	4,666,243	6,793,398	69%
	2027					5,541,004	5,362,182	103%	5,366,083	6,621,505	81%
	2028					6,369,595	5,216,393	122%	6,166,795	6,441,477	96%
	2029					7,283,676	5,062,356	144%	7,049,966	6,251,265	113%
	2030					8,257,923	4,899,004	169%	7,991,112	6,049,549	132%
	2031					9,293,596	4,725,920	197%	8,991,316	5,835,816	154%
	2032					10,368,236	4,542,975	228%	10,028,877	5,609,906	179%
	2033					11,470,432	4,348,164	264%	11,092,708	5,369,342	207%
	2034					12,545,463	4,144,046	303%	12,130,044	5,117,287	237%
	2035					13,587,205	3,932,442	346%	13,134,771	4,855,987	270%
	2036					14,571,310	3,712,603	392%	14,083,378	4,584,518	307%
	2037					15,501,910	3,486,413	445%	14,979,783	4,305,207	348%
	2038					16,273,670	3,257,553	500%	15,722,708	4,022,599	391%
	2039					16,937,688	3,027,684	559%	16,361,204	3,738,744	438%
	2040					17,486,641	2,799,495	625%	16,888,206	3,456,964	489%
	2041					17,872,243	2,576,397	694%	17,257,415	3,181,471	542%
	2042					18,109,150	2,359,406	768%	17,482,959	2,913,519	600%
	2043					18,156,856	2,150,122	844%	17,525,996	2,655,084	660%
	2044					18,062,836	1,949,889	926%	17,432,278	2,407,826	724%
	2045					17,871,759	1,759,753	1016%	17,244,864	2,173,036	794%
	2046					17,650,177	1,580,541	1117%	17,027,854	1,951,735	872%
	2047					17,310,222	1,412,773	1225%	16,696,871	1,744,567	957%
	2048					16,884,993	1,256,794	1343%	16,283,887	1,551,955	1049%
	2049					16,360,212	1,112,872	1470%	15,775,273	1,374,233	1148%
	2050					15,718,880	980,976	1602%	15,154,700	1,211,361	1251%
	2051					15,015,841	860,767	1744%	14,474,883	1,062,920	1362%
	2052					14,227,871	751,851	1892%	13,713,508	928,426	1477%
	2053					13,515,330	653,822	2067%	13,024,830	807,374	1613%
	2054					12,849,587	566,137	2270%	12,381,398	699,095	1771%
	2055					12,197,052	488,100	2499%	11,750,949	602,732	1950%
	2056					11,484,212	418,991	2741%	11,062,784	517,392	2138%
	2057					10,767,716	358,144	3007%	10,371,337	442,256	2345%
	2058					10,043,743	304,903	3294%	9,672,933	376,511	2569%
Value as of 12/31/15*:											
Past				5,964,429	2,965,191	67,876,649	4.4%	2,965,191	71,469,274	4.1%	
Future					189,246,136	93,747,754	201.9%	182,854,076	116,340,948	157.2%	
Lifetime					192,211,326	161,624,403	118.9%	185,819,267	187,810,222	98.9%	

\*discounted at maximum statutory valuation rates

**Test: Total Incurred Claims exceeds the Total Initial Premiums x Original Pricing Loss Ratio (instead of 58%) + Increased Premiums x 85%**

Accum Value of Minimum (Past Incurred Claims, Adjusted Originally Expected Incurred Claims) =	2,965,191		Accum Value of Past Initial Prm x 93.6% =	59,561,038
			Present Value of Future Initial Prm x 93.6% =	69,240,355
Present Value of Future Incurred Claims =	182,854,076		Accum Value of Prior Increases x 93.6% =	7,365,072
Total =	185,819,267	> =	Present Value of Future Increases x 93.6% =	39,705,023
			Total	175,871,487

**Appendix A - Comparison to New Business Rates (Corporate Choice P-FACE(2004) PA)**

Rates shown are for a 90-day EP, 100% HHC benefit, with ROP to age 70 and are per \$5 monthly benefit.

P-Face (2009) rates reflect a 1.15 Group Specific Factor to reflect the average case size of the P-Face (2004) groups and the equivalent commission load.

**Inflation Option: Future Purchase Option**

New Business Rates adjusted for Benefit Differences* :						P-FACE(2004) PA Rates after Requested Rate Increases excluding additional rate increase due to cost of delay :						P-FACE(2004) PA Rates after Requested Rate Increases including additional rate increase due to cost of delay :						P-FACE(2004) PA 2016 Rate Increases (%) :					
Issue Age	Benefit Period					Issue Age	Benefit Period					Issue Age	Benefit Period					Issue Age	Benefit Period				
	2	3	4	5	6		2	3	4	5	6		2	3	4	5	6		2	3	4	5	6
18-29	1.34	1.55	1.66	1.69	1.88	18-29	0.95	1.06	1.38	1.50	1.58	18-29	0.95	1.06	1.38	1.50	1.58	18-29	28%	28%	28%	28%	28%
30	1.42	1.63	1.76	1.78	1.97	30	0.95	1.06	1.38	1.50	1.58	30	0.95	1.06	1.38	1.50	1.58	30	28%	28%	28%	28%	28%
31	1.51	1.73	1.76	1.78	1.97	31	0.96	1.08	1.40	1.52	1.60	31	0.96	1.08	1.40	1.52	1.60	31	28%	28%	28%	28%	28%
32	1.51	1.73	1.82	1.85	2.07	32	0.97	1.10	1.42	1.54	1.62	32	0.97	1.10	1.42	1.54	1.62	32	28%	28%	28%	28%	28%
33	1.51	1.73	1.82	1.85	2.07	33	0.98	1.12	1.43	1.56	1.64	33	0.98	1.12	1.43	1.56	1.64	33	28%	28%	28%	28%	28%
34	1.51	1.73	1.87	1.95	2.18	34	0.99	1.14	1.45	1.58	1.67	34	0.99	1.14	1.45	1.58	1.67	34	28%	28%	28%	28%	28%
35	1.51	1.73	1.87	1.95	2.18	35	1.01	1.16	1.47	1.60	1.69	35	1.01	1.16	1.47	1.60	1.69	35	28%	28%	28%	28%	28%
36	1.51	1.73	1.87	1.95	2.18	36	1.02	1.18	1.49	1.62	1.72	36	1.02	1.18	1.49	1.62	1.72	36	28%	28%	28%	28%	28%
37	1.51	1.73	1.92	2.06	2.29	37	1.03	1.20	1.51	1.64	1.74	37	1.03	1.20	1.51	1.64	1.74	37	28%	28%	28%	28%	28%
38	1.51	1.75	1.92	2.06	2.30	38	1.04	1.22	1.53	1.66	1.77	38	1.04	1.22	1.53	1.66	1.77	38	28%	28%	28%	28%	28%
39	1.51	1.75	1.92	2.06	2.33	39	1.05	1.25	1.55	1.68	1.79	39	1.05	1.25	1.55	1.68	1.79	39	28%	28%	28%	28%	28%
40	1.51	1.75	1.92	2.08	2.34	40	1.07	1.30	1.58	1.70	1.82	40	1.07	1.30	1.58	1.70	1.82	40	28%	28%	28%	28%	28%
41	1.55	1.86	1.95	2.12	2.42	41	1.14	1.37	1.61	1.74	1.86	41	1.14	1.37	1.61	1.74	1.86	41	28%	28%	28%	28%	28%
42	1.55	1.88	2.12	2.31	2.64	42	1.20	1.46	1.65	1.79	1.91	42	1.20	1.46	1.65	1.79	1.91	42	28%	28%	28%	28%	28%
43	1.68	2.04	2.17	2.36	2.72	43	1.27	1.54	1.70	1.83	1.96	43	1.27	1.54	1.70	1.83	1.96	43	28%	28%	28%	28%	28%
44	1.85	2.07	2.37	2.58	2.81	44	1.35	1.63	1.80	1.90	2.01	44	1.35	1.63	1.80	1.90	2.01	44	28%	28%	28%	28%	28%
45	2.01	2.25	2.42	2.64	3.06	45	1.43	1.73	1.91	2.01	2.11	45	1.43	1.73	1.91	2.01	2.11	45	28%	28%	28%	28%	28%
46	2.03	2.30	2.66	2.75	3.18	46	1.51	1.84	2.03	2.13	2.24	46	1.51	1.84	2.03	2.13	2.24	46	28%	28%	28%	28%	28%
47	2.24	2.52	2.73	2.83	3.31	47	1.54	1.91	2.15	2.27	2.38	47	1.54	1.91	2.15	2.27	2.38	47	28%	28%	28%	28%	28%
48	2.44	2.60	2.85	3.10	3.63	48	1.57	1.96	2.29	2.41	2.53	48	1.57	1.96	2.29	2.41	2.53	48	28%	28%	28%	28%	28%
49	2.47	2.82	3.11	3.23	3.79	49	1.61	2.01	2.35	2.56	2.69	49	1.61	2.01	2.35	2.56	2.69	49	28%	28%	28%	28%	28%
50	2.71	2.91	3.22	3.35	3.97	50	1.64	2.06	2.39	2.69	2.85	50	1.64	2.06	2.39	2.69	2.85	50	28%	28%	28%	28%	28%
51	2.81	3.03	3.40	3.58	4.24	51	1.69	2.15	2.46	2.76	3.03	51	1.69	2.15	2.46	2.76	3.03	51	28%	28%	28%	28%	28%
52	3.07	3.35	3.74	3.79	4.54	52	1.73	2.24	2.53	2.83	3.10	52	1.73	2.24	2.53	2.83	3.10	52	28%	28%	28%	28%	28%
53	3.19	3.53	3.95	4.22	5.05	53	1.77	2.34	2.60	2.90	3.19	53	1.77	2.34	2.60	2.90	3.19	53	28%	28%	28%	28%	28%
54	3.53	3.91	4.38	4.48	5.39	54	1.82	2.44	2.67	2.97	3.27	54	1.82	2.44	2.67	2.97	3.27	54	28%	28%	28%	28%	28%
55	3.64	4.10	4.62	4.78	5.78	55	1.86	2.55	2.74	3.04	3.35	55	1.86	2.55	2.74	3.04	3.35	55	28%	28%	28%	28%	28%
56	3.84	4.44	4.85	5.06	6.12	56	2.02	2.67	2.92	3.24	3.58	56	2.02	2.67	2.92	3.24	3.58	56	28%	28%	28%	28%	28%
57	4.07	4.61	5.32	5.36	6.47	57	2.20	2.80	3.12	3.45	3.81	57	2.20	2.80	3.12	3.45	3.81	57	28%	28%	28%	28%	28%
58	4.36	5.00	5.60	5.69	6.69	58	2.39	2.93	3.32	3.68	4.07	58	2.39	2.93	3.32	3.68	4.07	58	28%	28%	28%	28%	28%
59	4.43	5.24	5.96	6.09	7.15	59	2.60	3.07	3.54	3.92	4.34	59	2.60	3.07	3.54	3.92	4.34	59	28%	28%	28%	28%	28%
60	4.75	5.53	6.37	6.54	7.49	60	2.82	3.22	3.78	4.18	4.63	60	2.82	3.22	3.78	4.18	4.63	60	28%	28%	28%	28%	28%
61	5.06	6.03	6.73	7.01	8.10	61	3.03	3.51	4.07	4.54	5.03	61	3.03	3.51	4.07	4.54	5.03	61	28%	28%	28%	28%	28%
62	5.41	6.37	7.34	7.54	8.83	62	3.25	3.82	4.39	4.93	5.46	62	3.25	3.82	4.39	4.93	5.46	62	28%	28%	28%	28%	28%
63	5.67	7.03	7.86	8.17	9.64	63	3.48	4.16	4.73	5.35	5.92	63	3.48	4.16	4.73	5.35	5.92	63	28%	28%	28%	28%	28%
64	6.16	7.53	8.24	8.89	10.61	64	3.74	4.53	5.10	5.81	6.43	64	3.74	4.53	5.10	5.81	6.43	64	28%	28%	28%	28%	28%
65	6.52	8.15	8.94	9.52	11.47	65	4.01	4.93	5.50	6.32	6.98	65	4.01	4.93	5.50	6.32	6.98	65	28%	28%	28%	28%	28%
66	7.16	8.86	9.63	10.37	12.21	66	4.42	5.44	6.09	6.98	7.74	66	4.42	5.44	6.09	6.98	7.74	66	28%	28%	28%	28%	28%
67	7.72	9.55	10.51	11.19	12.92	67	4.88	5.99	6.75	7.71	8.59	67	4.88	5.99	6.75	7.71	8.59	67	28%	28%	28%	28%	28%
68	8.43	10.16	11.36	12.20	13.84	68	5.38	6.61	7.48	8.53	9.53	68	5.38	6.61	7.48	8.53	9.53	68	28%	28%	28%	28%	28%
69	9.24	11.15	12.41	13.24	14.60	69	5.93	7.29	8.28	9.42	10.57	69	5.93	7.29	8.28	9.42	10.57	69	28%	28%	28%	28%	28%
70	10.06	11.93	13.47	14.29	15.58	70	6.54	8.04	9.18	10.42	11.72	70	6.54	8.04	9.18	10.42	11.72	70	28%	28%	28%	28%	28%
71	11.15	13.14	14.70	15.84	16.92	71	7.35	9.10	10.31	11.69	13.02	71	7.35	9.10	10.31	11.69	13.02	71	28%	28%	28%	28%	28%
72	12.31	14.43	16.09	17.55	18.43	72	8.26	10.31	11.58	13.12	14.46	72	8.26	10.31	11.58	13.12	14.46	72	28%	28%	28%	28%	28%
73	13.59	15.88	17.63	19.35	20.11	73	9.28	11.67	13.00	14.72	16.06	73	9.28	11.67	13.00	14.72	16.06	73	28%	28%	28%	28%	28%
74	15.15	17.46	19.20	21.56	21.92	74	10.43	13.22	14.61	16.51	17.84	74	10.43	13.22	14.61	16.51	17.84	74	28%	28%	28%	28%	28%
75	16.67	19.30	20.99	23.80	23.94	75	11.72	14.97	16.41	18.53	19.81	75	11.72	14.97	16.41	18.53	19.81	75	28%	28%	28%	28%	28%
76	18.52	21.71	23.74	27.01	27.08	76	12.82	16.38	17.95	20.28	21.67	76	12.82	16.38	17.95	20.28	21.67	76	28%	28%	28%	28%	28%
77	20.68	24.54	26.80	30.44	30.63	77	13.88	17.76	19.43	21.97	23.47	77	13.88	17.76	19.43	21.97	23.47	77	28%	28%	28%	28%	28%
78	23.04	27.51	30.24	34.51	34.69	78	14.99	19.20	21.01	23.76	25.37	78	14.99	19.20	21.01	23.76	25.37	78	28%	28%	28%	28%	28%
79	25.71	31.05	34.16	38.98	39.19	79	16.17	20.73	22.66	25.64	27.36	79	16.17										

**Appendix A - Comparison to New Business Rates (Corporate Choice P-FACE(2004) PA)**

Rates shown are for a 90-day EP, 100% HHC benefit, with ROP to age 70 and are per \$5 monthly benefit.

P-Face (2009) rates reflect a 1.15 Group Specific Factor to reflect the average case size of the P-Face (2004) groups and the equivalent commission load.

**Inflation Option: Compound Inflation Coverage**

New Business Rates adjusted for Benefit Differences* :						P-FACE(2004) PA Rates after Requested Rate Increases excluding additional rate increase due to cost of delay :						P-FACE(2004) PA Rates after Requested Rate Increases including additional rate increase due to cost of delay :						P-FACE(2004) PA 2016 Rate Increases (%) :					
Issue Age	Benefit Period					Issue Age	Benefit Period					Issue Age	Benefit Period					Issue Age	Benefit Period				
	2	3	4	5	6		2	3	4	5	6		2	3	4	5	6		2	3	4	5	6
18-29	10.49	12.99	13.89	15.09	17.72	18-29	2.85	3.69	4.06	4.75	5.36	18-29	2.85	3.69	4.06	4.75	5.36	18-29	28%	28%	28%	28%	28%
30	10.49	12.99	13.89	15.09	17.72	30	2.85	3.69	4.06	4.75	5.36	30	2.85	3.69	4.06	4.75	5.36	30	28%	28%	28%	28%	28%
31	10.49	12.99	13.89	15.09	17.72	31	2.89	3.73	4.14	4.82	5.42	31	2.89	3.73	4.14	4.82	5.42	31	28%	28%	28%	28%	28%
32	10.49	12.99	13.89	15.09	17.72	32	2.94	3.77	4.21	4.90	5.48	32	2.94	3.77	4.21	4.90	5.48	32	28%	28%	28%	28%	28%
33	10.49	12.99	13.89	15.09	17.72	33	2.99	3.82	4.29	4.98	5.55	33	2.99	3.82	4.29	4.98	5.55	33	28%	28%	28%	28%	28%
34	10.51	12.99	13.89	15.09	17.72	34	3.04	3.86	4.37	5.06	5.61	34	3.04	3.86	4.37	5.06	5.61	34	28%	28%	28%	28%	28%
35	10.51	13.03	13.89	15.09	17.75	35	3.09	3.91	4.45	5.13	5.68	35	3.09	3.91	4.45	5.13	5.68	35	28%	28%	28%	28%	28%
36	10.72	13.09	13.89	15.12	17.88	36	3.14	3.95	4.53	5.22	5.74	36	3.14	3.95	4.53	5.22	5.74	36	28%	28%	28%	28%	28%
37	10.77	13.39	13.89	15.24	18.06	37	3.19	4.00	4.62	5.30	5.81	37	3.19	4.00	4.62	5.30	5.81	37	28%	28%	28%	28%	28%
38	10.78	13.45	13.97	15.40	18.21	38	3.24	4.05	4.70	5.38	5.88	38	3.24	4.05	4.70	5.38	5.88	38	28%	28%	28%	28%	28%
39	11.04	13.52	14.08	15.52	18.40	39	3.30	4.09	4.79	5.47	5.95	39	3.30	4.09	4.79	5.47	5.95	39	28%	28%	28%	28%	28%
40	11.06	13.59	14.18	15.65	18.56	40	3.35	4.14	4.88	5.55	6.02	40	3.35	4.14	4.88	5.55	6.02	40	28%	28%	28%	28%	28%
41	11.22	13.82	14.53	16.07	19.15	41	3.39	4.21	4.97	5.62	6.10	41	3.39	4.21	4.97	5.62	6.10	41	28%	28%	28%	28%	28%
42	11.63	14.10	14.84	16.42	19.75	42	3.44	4.29	5.07	5.69	6.18	42	3.44	4.29	5.07	5.69	6.18	42	28%	28%	28%	28%	28%
43	11.80	14.30	15.25	16.82	20.34	43	3.48	4.36	5.17	5.76	6.26	43	3.48	4.36	5.17	5.76	6.26	43	28%	28%	28%	28%	28%
44	12.23	14.81	15.86	17.47	21.02	44	3.53	4.44	5.27	5.83	6.35	44	3.53	4.44	5.27	5.83	6.35	44	28%	28%	28%	28%	28%
45	12.41	15.07	16.25	17.90	21.68	45	3.57	4.52	5.37	5.90	6.43	45	3.57	4.52	5.37	5.90	6.43	45	28%	28%	28%	28%	28%
46	12.63	15.37	16.69	18.38	22.45	46	3.62	4.60	5.47	5.97	6.50	46	3.62	4.60	5.47	5.97	6.50	46	28%	28%	28%	28%	28%
47	13.11	15.63	17.13	18.87	22.91	47	3.68	4.68	5.57	6.05	6.58	47	3.68	4.68	5.57	6.05	6.58	47	28%	28%	28%	28%	28%
48	13.39	15.95	17.64	19.38	23.72	48	3.73	4.77	5.68	6.12	6.65	48	3.73	4.77	5.68	6.12	6.65	48	28%	28%	28%	28%	28%
49	13.90	16.28	18.12	19.90	24.55	49	3.79	4.85	5.78	6.20	6.73	49	3.79	4.85	5.78	6.20	6.73	49	28%	28%	28%	28%	28%
50	14.15	16.62	18.61	20.48	25.41	50	3.84	4.94	5.89	6.28	6.81	50	3.84	4.94	5.89	6.28	6.81	50	28%	28%	28%	28%	28%
51	14.47	17.04	19.09	20.75	26.00	51	3.97	5.08	6.06	6.48	7.04	51	3.97	5.08	6.06	6.48	7.04	51	28%	28%	28%	28%	28%
52	14.80	17.46	19.58	21.28	26.31	52	4.09	5.21	6.23	6.68	7.27	52	4.09	5.21	6.23	6.68	7.27	52	28%	28%	28%	28%	28%
53	15.43	17.90	19.88	21.63	26.88	53	4.23	5.35	6.42	6.89	7.52	53	4.23	5.35	6.42	6.89	7.52	53	28%	28%	28%	28%	28%
54	15.90	18.31	20.40	22.20	27.22	54	4.36	5.49	6.60	7.11	7.77	54	4.36	5.49	6.60	7.11	7.77	54	28%	28%	28%	28%	28%
55	16.27	18.77	20.93	22.52	27.87	55	4.50	5.64	6.79	7.34	8.04	55	4.50	5.64	6.79	7.34	8.04	55	28%	28%	28%	28%	28%
56	16.31	19.04	21.22	22.87	28.34	56	4.65	5.95	7.03	7.64	8.38	56	4.65	5.95	7.03	7.64	8.38	56	28%	28%	28%	28%	28%
57	16.65	19.54	21.53	23.18	28.88	57	4.80	6.27	7.28	7.96	8.74	57	4.80	6.27	7.28	7.96	8.74	57	28%	28%	28%	28%	28%
58	16.77	19.89	21.91	23.50	29.44	58	4.95	6.61	7.53	8.29	9.11	58	4.95	6.61	7.53	8.29	9.11	58	28%	28%	28%	28%	28%
59	17.13	20.15	22.05	23.59	29.66	59	5.11	6.97	7.79	8.64	9.51	59	5.11	6.97	7.79	8.64	9.51	59	28%	28%	28%	28%	28%
60	17.23	20.48	22.40	23.95	30.21	60	5.28	7.35	8.06	8.99	9.91	60	5.28	7.35	8.06	8.99	9.91	60	28%	28%	28%	28%	28%
61	17.32	20.84	22.81	24.40	30.34	61	5.64	7.67	8.54	9.50	10.43	61	5.64	7.67	8.54	9.50	10.43	61	28%	28%	28%	28%	28%
62	17.45	21.49	23.35	24.61	30.34	62	6.02	8.00	9.04	10.04	10.97	62	6.02	8.00	9.04	10.04	10.97	62	28%	28%	28%	28%	28%
63	17.55	21.96	23.69	25.18	30.34	63	6.43	8.35	9.57	10.60	11.53	63	6.43	8.35	9.57	10.60	11.53	63	28%	28%	28%	28%	28%
64	17.68	22.29	24.24	25.47	30.34	64	6.86	8.72	10.13	11.20	12.13	64	6.86	8.72	10.13	11.20	12.13	64	28%	28%	28%	28%	28%
65	17.89	22.83	24.71	25.89	30.36	65	7.32	9.10	10.73	11.83	12.76	65	7.32	9.10	10.73	11.83	12.76	65	28%	28%	28%	28%	28%
66	18.85	24.06	26.05	27.19	31.97	66	7.89	9.89	11.59	12.87	13.91	66	7.89	9.89	11.59	12.87	13.91	66	28%	28%	28%	28%	28%
67	20.03	25.09	27.21	28.67	33.53	67	8.49	10.75	12.53	14.01	15.17	67	8.49	10.75	12.53	14.01	15.17	67	28%	28%	28%	28%	28%
68	21.11	26.26	28.57	30.29	35.32	68	9.14	11.68	13.54	15.24	16.54	68	9.14	11.68	13.54	15.24	16.54	68	28%	28%	28%	28%	28%
69	22.04	27.48	29.97	31.88	37.06	69	9.84	12.69	14.63	16.59	18.03	69	9.84	12.69	14.63	16.59	18.03	69	28%	28%	28%	28%	28%
70	23.30	28.90	31.35	33.62	39.09	70	10.60	13.79	15.81	18.05	19.66	70	10.60	13.79	15.81	18.05	19.66	70	28%	28%	28%	28%	28%
71	25.37	30.92	32.95	35.40	40.79	71	11.66	15.16	17.59	19.91	21.53	71	11.66	15.16	17.59	19.91	21.53	71	28%	28%	28%	28%	28%
72	27.45	33.14	34.60	37.20	42.88	72	12.82	16.65	19.56	21.96	23.57	72	12.82	16.65	19.56	21.96	23.57	72	28%	28%	28%	28%	28%
73	29.77	35.37	36.19	39.18	44.71	73	14.11	18.30	21.75	24.23	25.81	73	14.11	18.30	21.75	24.23	25.81	73	28%	28%	28%	28%	28%
74	32.50	37.89	38.03	41.40	46.85	74	15.52	20.10	24.19	26.73	28.27	74	15.52	20.10	24.19	26.73	28.27	74	28%	28%	28%	28%	28%
75	35.26	40.71	39.94	43.52	48.98	75	17.07	22.09	26.90	29.48	30.95	75	17.07	22.09	26.90	29.48	30.95	75	28%	28%	28%	28%	28%
76	37.02	43.46	42.51	46.10	52.00	76	18.25	23.59	28.74	31.50	33.06	76	18.25	23.59	28.74	31.50	33.06	76	28%	28%	28%	28%	28%
77	38.77	46.14	45.26	48.92	55.30	77	19.32	24.96	30.41	33.34	34.96	77	19.32	24.96	30.41	33.34	34.96	77	28%	28%	28%	28%	28%
78	40.61	49.18	48.24	51.86	58.92	78	20.41	26.35	32.11	35.21													

**Appendix B1**  
**John Hancock Life Insurance Company (U.S.A.)**  
**P-FACE(2004) PA**

*Premiums to be used only with those  
that have not previously elected an inflation decrease option*

**Rates per \$5 of Monthly Benefit - 90 Day Elimination Period**  
**Home Health Monthly Benefit at 100% of Nursing Home Monthly Benefit**

Age	FPO Base					ABI Option: (5% Compound Inflation)				
	Benefit Period					Benefit Period				
	2 Years	3 Years	4 Years	5 Years	6 Years	2 Years	3 Years	4 Years	5 Years	6 Years
18-29	1.17	1.31	1.70	1.85	1.94	3.50	4.54	5.00	5.85	6.59
30	1.17	1.31	1.70	1.85	1.94	3.50	4.54	5.00	5.85	6.59
31	1.18	1.33	1.72	1.87	1.97	3.56	4.59	5.09	5.94	6.67
32	1.20	1.36	1.74	1.90	2.00	3.62	4.65	5.19	6.03	6.75
33	1.21	1.38	1.77	1.92	2.02	3.68	4.70	5.28	6.13	6.83
34	1.22	1.40	1.79	1.94	2.05	3.74	4.75	5.38	6.22	6.91
35	1.24	1.43	1.81	1.97	2.08	3.80	4.81	5.48	6.32	6.99
36	1.25	1.45	1.84	1.99	2.11	3.86	4.87	5.58	6.42	7.07
37	1.27	1.48	1.86	2.02	2.14	3.93	4.92	5.68	6.52	7.15
38	1.28	1.50	1.89	2.04	2.17	3.99	4.98	5.79	6.62	7.24
39	1.30	1.54	1.91	2.07	2.20	4.06	5.04	5.90	6.73	7.32
40	1.32	1.60	1.94	2.09	2.23	4.13	5.10	6.00	6.83	7.41
41	1.40	1.69	1.98	2.15	2.29	4.18	5.19	6.12	6.92	7.51
42	1.48	1.79	2.03	2.20	2.35	4.23	5.28	6.24	7.00	7.61
43	1.57	1.90	2.10	2.25	2.42	4.29	5.37	6.36	7.09	7.71
44	1.66	2.01	2.22	2.34	2.48	4.34	5.46	6.48	7.17	7.81
45	1.76	2.13	2.35	2.47	2.60	4.40	5.56	6.61	7.26	7.92
46	1.86	2.26	2.50	2.63	2.76	4.46	5.66	6.73	7.35	8.01
47	1.90	2.35	2.65	2.79	2.93	4.53	5.76	6.86	7.44	8.10
48	1.94	2.41	2.82	2.96	3.11	4.59	5.87	6.98	7.54	8.19
49	1.98	2.47	2.89	3.15	3.31	4.66	5.98	7.11	7.63	8.28
50	2.02	2.53	2.95	3.31	3.51	4.73	6.08	7.25	7.72	8.38
51	2.07	2.64	3.03	3.39	3.73	4.88	6.25	7.46	7.97	8.66
52	2.13	2.76	3.11	3.48	3.82	5.04	6.41	7.67	8.22	8.95
53	2.18	2.88	3.20	3.56	3.92	5.20	6.59	7.90	8.48	9.26
54	2.24	3.01	3.29	3.65	4.02	5.37	6.76	8.13	8.75	9.57
55	2.29	3.14	3.38	3.74	4.13	5.54	6.94	8.36	9.03	9.89
56	2.49	3.29	3.60	3.99	4.40	5.72	7.32	8.65	9.41	10.31
57	2.71	3.45	3.84	4.25	4.70	5.91	7.72	8.95	9.80	10.76
58	2.94	3.61	4.09	4.53	5.01	6.10	8.14	9.27	10.20	11.22
59	3.20	3.78	4.36	4.83	5.34	6.29	8.58	9.59	10.63	11.70
60	3.47	3.97	4.65	5.14	5.70	6.50	9.05	9.92	11.07	12.20
61	3.73	4.32	5.01	5.59	6.19	6.94	9.44	10.51	11.69	12.83
62	4.00	4.70	5.40	6.07	6.72	7.41	9.85	11.12	12.35	13.50
63	4.29	5.12	5.83	6.59	7.29	7.91	10.28	11.78	13.05	14.20
64	4.60	5.57	6.28	7.16	7.91	8.44	10.73	12.47	13.78	14.93
65	4.94	6.07	6.77	7.77	8.58	9.01	11.20	13.20	14.56	15.70
66	5.44	6.69	7.50	8.59	9.52	9.71	12.17	14.27	15.84	17.12
67	6.00	7.38	8.31	9.50	10.57	10.45	13.23	15.42	17.24	18.67
68	6.62	8.14	9.20	10.50	11.72	11.25	14.37	16.66	18.76	20.35
69	7.30	8.97	10.19	11.60	13.01	12.12	15.62	18.01	20.42	22.19
70	8.04	9.89	11.29	12.82	14.43	13.04	16.98	19.46	22.22	24.19
71	9.04	11.20	12.68	14.39	16.03	14.35	18.65	21.65	24.51	26.49
72	10.16	12.69	14.25	16.14	17.80	15.78	20.50	24.07	27.03	29.01
73	11.42	14.37	16.01	18.11	19.77	17.36	22.52	26.77	29.82	31.77
74	12.84	16.27	17.98	20.33	21.96	19.10	24.74	29.77	32.89	34.79
75	14.43	18.43	20.20	22.81	24.38	21.01	27.19	33.11	36.28	38.10
76	15.78	20.17	22.09	24.96	26.67	22.46	29.04	35.38	38.77	40.69
77	17.08	21.85	23.92	27.04	28.88	23.78	30.72	37.43	41.03	43.03
78	18.46	23.64	25.86	29.24	31.22	25.12	32.43	39.52	43.34	45.43
79	19.90	25.51	27.89	31.56	33.68	26.49	34.16	41.65	45.68	47.86
80	21.41	27.47	30.02	33.99	36.25	27.87	35.91	43.79	48.04	50.30
81	23.98	30.77	33.62	38.06	40.60	31.22	40.22	49.04	53.80	56.33
82	26.55	34.07	37.22	42.14	44.95	34.56	44.53	54.30	59.57	62.37
83	29.55	37.91	41.42	46.90	50.02	38.46	49.56	60.43	66.29	69.41
84	33.19	42.59	46.53	52.68	56.18	43.20	55.67	67.87	74.46	77.96
85	37.04	47.53	51.93	58.80	62.71	48.22	62.13	75.75	83.11	87.02
86	41.11	52.75	57.63	65.25	69.59	53.52	68.95	84.07	92.23	96.57
87	45.82	58.79	64.24	72.73	77.57	59.65	76.85	93.70	102.80	107.64
88	50.96	65.39	71.44	80.89	86.27	66.34	85.47	104.21	114.33	119.71
89	56.96	73.08	79.85	90.40	96.42	74.14	95.53	116.47	127.78	133.80
90	74.94	96.16	105.06	118.95	126.86	97.55	125.70	153.25	168.13	176.05

**Appendix B2**  
**John Hancock Life Insurance Company (U.S.A.)**  
**P-FACE(2004) PA**

*Premiums to be used only with those  
that have previously elected an inflation decrease option*

**Rates per \$5 of Monthly Benefit - 90 Day Elimination Period**  
**Home Health Monthly Benefit at 100% of Nursing Home Monthly Benefit**

Age	ABI Option: (4.5% Compound Inflation)				
	Benefit Period				
	2 Years	3 Years	4 Years	5 Years	6 Years
18-29	2.83	3.66	4.03	4.71	5.32
30	2.83	3.66	4.03	4.71	5.32
31	2.87	3.70	4.11	4.79	5.38
32	2.92	3.75	4.18	4.86	5.44
33	2.97	3.79	4.26	4.94	5.51
34	3.02	3.83	4.34	5.02	5.57
35	3.07	3.88	4.42	5.10	5.64
36	3.12	3.92	4.50	5.18	5.70
37	3.17	3.97	4.58	5.26	5.77
38	3.22	4.02	4.67	5.34	5.84
39	3.27	4.06	4.75	5.42	5.90
40	3.33	4.11	4.84	5.51	5.97
41	3.37	4.18	4.94	5.58	6.05
42	3.41	4.26	5.03	5.65	6.13
43	3.46	4.33	5.13	5.72	6.22
44	3.50	4.41	5.23	5.79	6.30
45	3.55	4.48	5.33	5.86	6.38
46	3.60	4.56	5.43	5.93	6.46
47	3.65	4.65	5.53	6.00	6.53
48	3.70	4.73	5.63	6.08	6.60
49	3.76	4.82	5.74	6.15	6.68
50	3.81	4.91	5.84	6.23	6.76
51	3.94	5.04	6.01	6.43	6.98
52	4.06	5.17	6.19	6.63	7.22
53	4.20	5.31	6.37	6.84	7.46
54	4.33	5.45	6.55	7.06	7.72
55	4.47	5.60	6.74	7.28	7.98
56	4.61	5.90	6.98	7.59	8.32
57	4.76	6.23	7.22	7.90	8.67
58	4.92	6.56	7.47	8.23	9.05
59	5.08	6.92	7.73	8.57	9.43
60	5.24	7.30	8.00	8.93	9.84
61	5.60	7.61	8.47	9.43	10.35
62	5.97	7.95	8.97	9.96	10.88
63	6.38	8.29	9.50	10.52	11.45
64	6.81	8.65	10.06	11.11	12.04
65	7.27	9.03	10.65	11.74	12.66
66	7.83	9.81	11.51	12.78	13.81
67	8.43	10.67	12.44	13.90	15.05
68	9.07	11.59	13.44	15.13	16.41
69	9.77	12.60	14.52	16.47	17.90
70	10.52	13.69	15.70	17.92	19.51
71	11.57	15.04	17.46	19.76	21.37
72	12.73	16.53	19.41	21.80	23.40
73	14.00	18.16	21.59	24.05	25.62
74	15.40	19.96	24.01	26.53	28.06
75	16.94	21.93	26.70	29.26	30.72
76	18.72	24.20	29.48	32.31	33.91
77	20.68	26.71	32.54	35.68	37.42
78	22.84	29.48	35.93	39.40	41.30
79	25.23	32.54	39.66	43.50	45.58
80	27.87	35.91	43.79	48.04	50.30
81	31.22	40.22	49.04	53.80	56.33
82	34.56	44.53	54.30	59.57	62.37
83	38.46	49.56	60.43	66.29	69.41
84	43.20	55.67	67.87	74.46	77.96
85	48.22	62.13	75.75	83.11	87.02
86	53.52	68.95	84.07	92.23	96.57
87	59.65	76.85	93.70	102.80	107.64
88	66.34	85.47	104.21	114.33	119.71
89	74.14	95.53	116.47	127.78	133.80
90	97.55	125.70	153.25	168.13	176.05

**Appendix C1**  
**John Hancock Life Insurance Company (U.S.A.)**  
**P-FACE(2004) PA**

*Premiums to be used only with those  
that have not previously elected an inflation decrease option*

**Rates per \$5 of Monthly Benefit - 90 Day Elimination Period**  
**Home Health Monthly Benefit at 100% of Nursing Home Monthly Benefit**

Age	ABI Option: (4.2% Compound Inflation)				
	Benefit Period				
	2 Years	3 Years	4 Years	5 Years	6 Years
18-29	2.73	3.53	3.89	4.55	5.13
30	2.73	3.53	3.89	4.55	5.13
31	2.77	3.58	3.97	4.62	5.19
32	2.82	3.62	4.04	4.70	5.25
33	2.86	3.66	4.11	4.77	5.32
34	2.91	3.70	4.19	4.84	5.38
35	2.96	3.74	4.27	4.92	5.44
36	3.01	3.79	4.35	5.00	5.50
37	3.06	3.83	4.43	5.08	5.57
38	3.11	3.88	4.51	5.16	5.63
39	3.16	3.92	4.59	5.24	5.70
40	3.21	3.97	4.67	5.32	5.77
41	3.25	4.04	4.77	5.38	5.84
42	3.29	4.11	4.86	5.45	5.92
43	3.34	4.18	4.95	5.52	6.00
44	3.38	4.25	5.05	5.59	6.08
45	3.42	4.33	5.15	5.65	6.16
46	3.47	4.41	5.24	5.72	6.23
47	3.52	4.49	5.34	5.80	6.30
48	3.58	4.57	5.44	5.87	6.38
49	3.63	4.65	5.54	5.94	6.45
50	3.68	4.74	5.64	6.01	6.52
51	3.80	4.86	5.81	6.20	6.74
52	3.92	4.99	5.97	6.40	6.97
53	4.05	5.13	6.15	6.60	7.21
54	4.18	5.27	6.33	6.81	7.45
55	4.32	5.41	6.51	7.03	7.70
56	4.45	5.70	6.74	7.32	8.03
57	4.60	6.01	6.97	7.63	8.37
58	4.75	6.34	7.21	7.94	8.73
59	4.90	6.68	7.47	8.27	9.11
60	5.06	7.04	7.73	8.62	9.50
61	5.40	7.35	8.18	9.10	9.99
62	5.77	7.67	8.66	9.62	10.51
63	6.16	8.00	9.17	10.16	11.05
64	6.57	8.35	9.71	10.73	11.62
65	7.02	8.72	10.28	11.33	12.23
66	7.56	9.47	11.11	12.33	13.33
67	8.14	10.30	12.01	13.42	14.53
68	8.76	11.19	12.97	14.61	15.85
69	9.43	12.16	14.02	15.90	17.28
70	10.16	13.22	15.15	17.30	18.84
71	11.17	14.52	16.85	19.08	20.63
72	12.29	15.96	18.74	21.05	22.59
73	13.52	17.53	20.84	23.22	24.73
74	14.87	19.26	23.18	25.61	27.09
75	16.36	21.17	25.78	28.25	29.66
76	17.49	22.61	27.54	30.19	31.68
77	18.51	23.91	29.14	31.94	33.50
78	19.56	25.25	30.77	33.74	35.37
79	20.63	26.60	32.42	35.56	37.26
80	21.70	27.96	34.09	37.40	39.16
81	24.30	31.32	38.18	41.89	43.86
82	26.91	34.67	42.27	46.38	48.56
83	29.95	38.58	47.04	51.61	54.04
84	33.64	43.34	52.84	57.97	60.70
85	37.54	48.37	58.98	64.70	67.75
86	41.66	53.68	65.45	71.81	75.19
87	46.44	59.83	72.95	80.04	83.80
88	51.65	66.54	81.13	89.01	93.20
89	57.72	74.37	90.68	99.48	104.17
90	75.95	97.86	119.32	130.90	137.06

**Appendix C2**  
**John Hancock Life Insurance Company (U.S.A.)**  
**P-FACE(2004) PA**

*Premiums to be used only with those  
that have previously elected an inflation decrease option*

**Rates per \$5 of Monthly Benefit - 90 Day Elimination Period**  
**Home Health Monthly Benefit at 100% of Nursing Home Monthly Benefit**

Age	ABI Option: (3.8% Compound Inflation)				
	Benefit Period				
	2 Years	3 Years	4 Years	5 Years	6 Years
18-29	2.20	2.85	3.14	3.67	4.14
30	2.20	2.85	3.14	3.67	4.14
31	2.24	2.88	3.20	3.73	4.19
32	2.27	2.92	3.26	3.79	4.24
33	2.31	2.95	3.32	3.85	4.29
34	2.35	2.99	3.38	3.91	4.34
35	2.39	3.02	3.44	3.97	4.39
36	2.43	3.06	3.50	4.03	4.44
37	2.47	3.09	3.57	4.09	4.49
38	2.51	3.13	3.63	4.16	4.54
39	2.55	3.16	3.70	4.22	4.60
40	2.59	3.20	3.77	4.29	4.65
41	2.62	3.26	3.84	4.34	4.71
42	2.66	3.31	3.92	4.40	4.78
43	2.69	3.37	3.99	4.45	4.84
44	2.73	3.43	4.07	4.50	4.90
45	2.76	3.49	4.15	4.56	4.97
46	2.80	3.55	4.23	4.62	5.03
47	2.84	3.62	4.31	4.67	5.08
48	2.88	3.68	4.39	4.73	5.14
49	2.93	3.75	4.47	4.79	5.20
50	2.97	3.82	4.55	4.85	5.26
51	3.07	3.92	4.68	5.00	5.44
52	3.16	4.03	4.82	5.16	5.62
53	3.27	4.14	4.96	5.33	5.81
54	3.37	4.25	5.10	5.50	6.01
55	3.48	4.36	5.25	5.67	6.21
56	3.59	4.60	5.43	5.91	6.48
57	3.71	4.85	5.62	6.15	6.75
58	3.83	5.11	5.82	6.41	7.04
59	3.95	5.39	6.02	6.67	7.35
60	4.08	5.68	6.23	6.95	7.66
61	4.36	5.93	6.60	7.34	8.06
62	4.65	6.19	6.98	7.75	8.47
63	4.97	6.46	7.39	8.19	8.91
64	5.30	6.74	7.83	8.65	9.37
65	5.66	7.03	8.29	9.14	9.86
66	6.09	7.64	8.96	9.95	10.75
67	6.56	8.30	9.68	10.82	11.72
68	7.06	9.02	10.46	11.78	12.78
69	7.61	9.81	11.31	12.82	13.93
70	8.19	10.66	12.22	13.95	15.19
71	9.01	11.71	13.59	15.39	16.63
72	9.91	12.87	15.11	16.97	18.22
73	10.90	14.14	16.81	18.72	19.95
74	11.99	15.54	18.69	20.65	21.84
75	13.19	17.07	20.79	22.78	23.92
76	14.57	18.84	22.95	25.15	26.40
77	16.10	20.79	25.34	27.78	29.13
78	17.78	22.95	27.97	30.67	32.15
79	19.64	25.33	30.88	33.87	35.48
80	21.70	27.96	34.09	37.40	39.16
81	24.30	31.32	38.18	41.89	43.86
82	26.91	34.67	42.27	46.38	48.56
83	29.95	38.58	47.04	51.61	54.04
84	33.64	43.34	52.84	57.97	60.70
85	37.54	48.37	58.98	64.70	67.75
86	41.66	53.68	65.45	71.81	75.19
87	46.44	59.83	72.95	80.04	83.80
88	51.65	66.54	81.13	89.01	93.20
89	57.72	74.37	90.68	99.48	104.17
90	75.95	97.86	119.32	130.90	137.06

# John Hancock Life Insurance Company (U.S.A.)

(Not licensed in New York)

[William J. Ball  
Vice President]

Long-Term Care Insurance  
P.O. Box 111, R-02, Suite 1700  
Boston, Massachusetts 02117-0111



[First Name] [Last Name]

[Date]

[Address1]

[Address2]

[City], [State] [Zip]

Ref: Notice of Premium Rate Increase – Group Long-Term Care Policy No. [xxxxx]; LTC ID [xxxxxxxx]. **Decision required by [Date].**

Dear [First Name] [Last Name],

John Hancock is committed to ensuring long-term care (LTC) insurance benefits will be there for our insureds when they need them the most. To uphold this responsibility, we continuously monitor the claims experience on our inforce LTC policies. Over the years, comprehensive studies of our LTC experience have found that more insureds than expected are submitting claims at older ages, claims are lasting longer than expected and more of our insureds are living to the ages where claim usage is higher. These factors have led to an increase in our expected future claims and, as a result, we have determined that there is a need to increase premiums so we can meet our future claims obligations.

## Options to Minimize the Premium Increase

We sincerely regret having to take this action, and understand that a premium increase may not be affordable for some. At the same time, we strongly believe in the importance of LTC insurance and encourage you to retain your coverage and the valuable protection that it provides. **Therefore, we are offering you an option to keep your premium at its current level by reducing your future annual inflation rate and keeping all other benefits the same.** This is a one-time offer, so please be sure to review it carefully. Please see the enclosed "Options Worksheet" for more information.

## About the Premium Increase

Your LTC insurance premium will increase from [current premium] to [new premium], monthly, on [Date].

It is important to know that this premium rate increase has been permitted to be implemented by the applicable Department of Insurance. We would like to assure you that no individual has been singled out for an increase, nor is the increase due to any one person's advancing age, changing health, or prior claims activity. Our decision to increase premiums is related to future anticipated claims based on all of the insureds covered under your plan design and policy series. As a reminder, premium rates are not guaranteed, and could be increased again in the future.

We recommend that you review all options available to you (including paying the rate increase and any available benefit reduction options) to determine which option is appropriate for your needs and consult with your family members and other advisors. You may also wish to contact the State Health Insurance Assistance Program (SHIP) located in your state if you need additional counseling on determining your response. Please go to [www.shiptalk.org](http://www.shiptalk.org) to find the SHIP location closest to you. In addition, you may also wish to contact your State Department/Bureau of Insurance if you need additional counseling on determining your response. Please go to [http://naic.org/state\\_web\\_map.htm](http://naic.org/state_web_map.htm) to find your State Department/Bureau of Insurance.



### Included in this Package

As previously mentioned, John Hancock wants to ensure that you have a clear understanding of the need for this premium rate increase as well as any options that might be available to minimize the increase. We hope the information included in this package can answer any questions you may have about the premium rate increase and help guide you through the process.

- **Options Worksheet** (pages 3 and 4) – details your current coverage and will provide you with options you can elect in order to help mitigate the premium increase. Please be advised that all of the options available to you may not be of equal value, so please review this information carefully.
- **Frequently Asked Questions** (page 5) – John Hancock has compiled a list of some of our most frequently asked questions. We hope this will help with any questions you may have about the increase and the impact it will have on your LTC policy.
- **Coverage Change Request Form** (page 6) – after reviewing your benefit and premium information, should you choose to make a change to your coverage, we've included a coverage change form you can fill out and send directly to John Hancock.

### Next Steps

- If you decide to reduce your coverage as outlined in the "Options Worksheet," simply complete the "Coverage Change Request Form" and return it to John Hancock by the date referenced on the form.
- If you choose to make no changes to your coverage, no action is required, other than to pay the new increased premium.

### For Further Assistance

Again, we sincerely regret having to take this action, but we hope you find that the options provided are helpful. If you have any questions, please contact one of our customer service representatives at 877-606-7757, Monday through Friday, 8:00 a.m. – 6:00 p.m., Eastern Time. The TTY number for the hearing impaired is 800-255-1808. Our dedicated team is available to help you make a decision that best meets your personal needs.

Sincerely,



[William J. Ball  
Vice President, U.S. Insurance Operations]

Enclosures:

Options Worksheet  
Frequently Asked Questions  
Coverage Change Request Form

# OPTIONS WORKSHEET FOR [FIRST NAME] [LAST NAME]

Your LTC ID: [XXXXXXX]

To keep your premium at its current level, as described on page 1, we are offering you an option to reduce your future annual inflation rate. The table below shows your current premium and the new premium you will be charged if you keep your current annual inflation rate. The table also shows what your reduced inflation rate will be if you choose the personalized option, which will only be applied to future inflation increases that occur after the rate increase effective date. All other existing benefits and previous inflation increases that have already been applied to your coverage through the effective date of the inflation rate reduction will be maintained.

	Keep your current annual inflation rate	Reduce your future annual inflation rate
Daily Maximum Benefit (DMB) <sup>1</sup>	[\$XXX]	[\$XXX]
Lifetime Maximum Benefit (LMB) <sup>2</sup>	[X]-year	[X]-year
Inflation Protection (ABI) <sup>3</sup>	[5%] ABI	[X.X%] ABI
Current Premium (monthly)	[\$XX.XX]	
<b>New Premium (monthly) *</b>	<b>[\$XX.XX]</b>	<b>[\$XX.XX]</b>

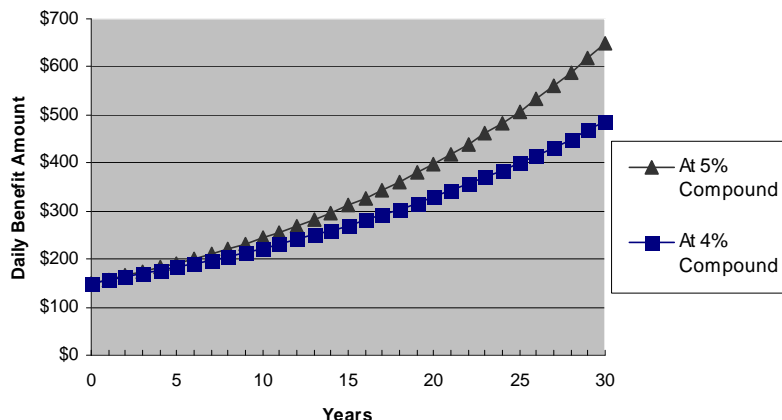
\*As of [Month XX, YYYY]

Please note: Variations of this personalized option are not available, though other options to help minimize the increase may be. [It is also important to note that your coverage includes a "Limited Pay" premium payment provision. Please consider the number of remaining payments before making the decision to reduce your benefits.] For more information, please call John Hancock at **877-606-7757**.

## [Information to Consider]

The graph below is an example of how a \$150 Daily Maximum Benefit amount increases over the next 30 years at [5%] compared with [4%] annually compounding rates. To provide perspective, the table to the right shows the national average annual increase over the past [eight] years for the cost of care in various care settings. Please visit [www.jhgroupinfo.com](http://www.jhgroupinfo.com) for current cost of care information specific to your area. As you evaluate what is best for you, we encourage you to consider the current and projected cost of care in your area, as well as how much of that amount you are willing and able to pay from your own savings.]

How a \$150 Daily Benefit Increases Over Time with a 5% and a 4% Compound Inflation Increase



## Trends in the Cost of Care

### Long-Term Care Setting

### 8-Year Average Annual Increase

Nursing Home: Private Room	[3.1]%
Nursing Home: Semi-Private Room	[3.2]%
Assisted Living Facility	[2.1]%
Home Health Care Aide	[1.5]%
Adult Day Care	[1.5]%

[The 8-year average annual increases are based on a subset of common providers from our 2008, 2013 and 2016 Cost of Care surveys.]

<sup>1</sup>Daily Maximum Benefit (DMB) is the most the coverage will reimburse for the costs of covered long-term care services received on any day. Your DMB shown above reflects any inflation increase through [Month XX, YYYY].

<sup>2</sup>Lifetime Maximum Benefit (LMB) represents the total pool of money available to reimburse the costs of covered long-term care services you receive while insured, and is calculated by multiplying your DMB by the number of days in [x year]s.

<sup>3</sup>Automatic Benefit Increase (ABI) automatically increases your coverage by the applicable percentage annually.

## OPTIONS WORKSHEET FOR [FIRST NAME] [LAST NAME]

Your LTC ID: [XXXXXXX]

### ALTERNATIVE OPTIONS

#### **[Exercise the Nonforfeiture Benefit, resulting in paid-up coverage with reduced benefits]**

Your coverage includes a Nonforfeiture Benefit, which enables you to discontinue paying premiums and provides you with paid-up coverage with a reduced level of benefits. [You are eligible to exercise the Nonforfeiture Benefit, provided that you pay your premiums through [Nonforfeiture Elig Date].] Your new reduced Lifetime Maximum Benefit amount will be \$[XXX,XXX].\*\* By exercising this option, you will significantly reduce your benefits and may terminate other benefit features, so you should give this careful consideration before you select it.]

#### **[Exercise the Contingent Nonforfeiture Benefit, resulting in paid-up coverage with reduced benefits]**

You are eligible to exercise the Contingent Nonforfeiture Benefit, provided that you pay your premiums through [Month XX, YYYY]. This benefit enables you to discontinue paying future premiums after that date, and retain paid-up coverage with a reduced Lifetime Maximum Benefit. Your new reduced Lifetime Maximum Benefit amount would be \$[XXX,XXX].\*\* By exercising this option, you will significantly reduce your benefits and may terminate other benefit features, so you should give this careful consideration before you select it. If you discontinue premium payment at any point within 120 days after [Month XX, YYYY], this Contingent Nonforfeiture Benefit will automatically apply. This benefit will not be available beyond 120 days after [Month XX, YYYY].]

[The following terms apply if you choose to exercise the [Nonforfeiture][Contingent Nonforfeiture]Benefit:

- No benefits will be paid in excess of your new Lifetime Maximum Benefit.
- Benefits will be paid subject to the Daily Maximum Benefit levels (and other coverage limits) in effect at the time you convert your coverage to paid-up status.
- If you had previously received benefits and then recovered, no benefits will be paid in excess of the remaining benefit maximum(s).
- Optional benefit provisions may automatically terminate.
- No future inflation adjustments will be made.
- All other applicable coverage provisions, conditions, and limitations will remain in effect.]

*[\*\*Calculated based on the greater of [30/90] times your Daily Maximum Benefit or the total amount of premiums payable through [Month XX, YYYY]. The actual benefit amount may be higher or lower as it will be calculated as of the effective date of your paid-up status.]*

### IMPORTANT DATES

- ▶ If you choose an option listed on this Options Worksheet, you must complete, sign and return the enclosed Coverage Change Request Form by **[Month XX, YYYY]**.
- ▶ If you choose to make no changes to your coverage, no action is required. Your level of coverage will not change and your new increased premium will become effective on **[Month XX, YYYY]**.

## FREQUENTLY ASKED QUESTIONS

### 1. Why do you need to raise premium rates — can you explain further?

When pricing a long-term care insurance product, insurance companies use the best available information at that time to predict how many policyholders might ultimately use the benefit in the future. This involves making certain assumptions about a variety of factors including: particular medical conditions, the expected lifespan of policyholders, the length of time policyholders keep their policies, and the cost of receiving long-term care services. If the actual experience differs in an unfavorable way from the expected experience based on these assumptions, a premium rate increase may become necessary.

Over the years, comprehensive studies of our group Long-Term Care experience have found that more insureds than expected are submitting claims at older ages, claims are lasting longer than expected and more of our insureds are living to the ages where claim usage is higher. These factors have led to an increase in our expected future claims. Based on the results of these studies, we have determined that there is a need to increase premiums on the policy series that includes your LTC coverage.

### 2. What is the policy provision that allows you to raise my premiums?

The provision that allows for an increase in premiums can be found in your certificate. Your certificate indicates that, while your insurance company cannot change coverage or refuse to renew coverage for reasons other than nonpayment of premiums, the company is allowed to change or increase premiums so long as the increase applies to an entire class or series of policies. We are required to file premium increases on policy series, along with actuarial justification, with the applicable state department of insurance.

### 3. Have I been singled out for this rate increase because of my age or health?

No. No individual has been singled out for an increase, nor is the increase due to any one person's advancing age or changing health.

### 5. Is the premium rate increase due to the economic environment?

No. We are increasing premium rates due to our claims experience, which indicates higher-than-expected claims on your policy series in the future.

### 6. Is there an alternative to paying higher premiums?

Yes. We are offering benefit reduction alternatives and, in most cases, at least one option that will enable you to keep your premiums at or close to the same level as what you are paying today. The enclosed Options Worksheet outlines your options. To further review these options, please contact one of our customer service representatives.

### 7. What is the purpose of the enclosed Coverage Change Request Form?

The enclosed Coverage Change Request Form need only be completed and returned to John Hancock should you decide to adjust your benefits.

### 8. If I pay premiums through payroll deduction and my premium is changing, is there any action I need to take?

No. If you have authorized payment via payroll deduction, we will deduct the new premium amount from your paycheck.

### 9. If I pay premiums through automatic bank withdrawal and my premium is changing, is there any action I need to take?

No. If you have authorized payment via automatic bank withdrawal through John Hancock, we will deduct the new premium amount from your bank account.

### 10. If I pay premiums through online banking and my premium is changing, is there any action I need to take?

Yes. Please update your online banking payment information with the new premium amount prior to the rate increase effective date.

### 11. If I choose to reduce my future annual inflation rate, when will the new inflation rate become effective?

Your automatic inflation benefit for this year will be prorated through your next inflation increase anniversary date. For example, if an insured's rate increase becomes effective July 1 and the last inflation increase was on January 1, coverage would inflate by the current rate for January 1 through June 30, and by the reduced inflation percentage for July 1 through December 31. The reduced inflation percentage would apply each year after that.

**COVERAGE CHANGE REQUEST FORM FOR [FIRST NAME] [LAST NAME]**

Your LTC ID: [XXXXXXX]

[Employer Name]

John Hancock Life Insurance Company (U.S.A.)



To minimize the premium increase, we are offering you a one-time opportunity to elect your personalized option.

If you choose to make no changes to your current coverage, no action is required and your new increased premium will be effective on **[Month XX, YYYY]**.

If you choose to change your coverage, you must select an option listed below, sign and return this Coverage Change Request Form by **[Month XX, YYYY]**.

**Step 1: Select an option (please choose only one option)**

For more details, please see your Options Worksheet.

COVERAGE CHANGE OPTIONS		YOUR NEW PREMIUM EFFECTIVE [MONTH XX, YYYY]
<input type="checkbox"/>	[Reduce your future annual inflation rate from [5]% to [X.X]%.	N/A]
<input type="checkbox"/>	[Exercise the [Nonforfeiture/Contingent Nonforfeiture] Benefit. You will no longer pay premiums, but your benefits will be reduced.] [This change will be effective on [Effective Date] or, if earlier, your paid-through date[, which must be on or after [NFO Elig Date]].]	N/A]
<input type="checkbox"/>	[Cancel your coverage. This change will be effective on the earlier of your paid-through date or the last day of the month in which John Hancock receives this form.	N/A]

**Step 2: Review Agreement and Acknowledgement**

I understand that my benefits and/or premium for those benefits will change based upon the option that I select.

I understand that premium rates are not guaranteed and may be increased again in the future if I am among the group of insureds whose premiums are determined to be inadequate.

If I select an option to change my coverage, I understand that, within 30 days of the date this change becomes effective, I may cancel the change in my coverage and return to my original coverage at the increased premium level.

I understand the coverage change I selected above. By signing below, I agree that, except if otherwise indicated above, the selected change will be effective on [Month XX, YYYY], provided John Hancock receives this form by the date specified below.

**Step 3: Sign and Date**\_\_\_\_\_  
Signature ([FirstName] [LastName])\_\_\_\_\_  
Date**Step 4: Return this completed form using the enclosed postage-paid envelope by [Month XX, YYYY].****Mail**

John Hancock  
LTC Coverage Election  
P.O. Box 111, R-02, Ste 1700  
Boston, MA 02117-0111

**FAX**

John Hancock  
LTC Coverage Election  
877-606-7771

**EMAIL**

LTCforms@jhancock.com